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ABSTRACT

A study was conducted utilizing new postsecondary Interstate Distributive Education Curriculum Consortium (IDECC) curriculum materials to evaluate through experimental research the effectiveness of IDECC's systematic teaching approach. The study was quasi-experiential involving two levels of treatment: (1) the postsecondary IDECC teaching approach and (2) the postsecondary traditional teaching approach. Sixteen classes were randomly selected from a population of twenty-eight volunteer sites. The IDECC approach utilized selected postsecondary IDECC competency-based materials as their unit of instruction. The traditional instructors developed lesson plans as their instructional material within a workshop setting. Findings based on analysis of covariance by regression utilizing forty sources of variance indicated that only one source of variance, the effect of schools, made a significant contribution. In addition, it was found that teaching approach when in combination with related work experience made a significant contribution to the student's posttest score. (Appended material includes a unit of instruction outline, objectives and resources utilized in the study, pretest and posttest questionnaires, and the IDECC instructor's handbook.) (LRA)

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EXPERIMENTATION AND FURTHER VALIDATION OF THE IDECC COMPETENCY BASED TEACHING APPROACH IN POST-SECONDARY EDUCATION

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Columbus, Ohio

September 22, 1978

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TABLE OF CONTENTS

		PAGE
LIST OF TABLES		v.
LIST OF FIGURES		vii.
CHAPTER		
1	INTRODUCTION AND BACKGROUND OF THE STUDY	1
	Need and Purpose for the Study	3
	Statement of the Problem	4
	Assumptions	7
	Delimitations of the Study	7
	Limitations of the Study	9
	Definition of Terms	11
2	METHODS AND PROCEDURES	14
	Definition of Treatment	14
	IDECC Systematic Approach - Experimental Group	14
	Traditional Approach - Control Group	16
	Selection of Content	16
	Development of Instructional Materials	17
	IDECC Instructional Materials	17
	Traditional Instructional Materials	17
	Teaching Procedures	18
	IDECC Teaching Procedures	18
	Traditional Teaching Procedures	18
	Population and Sample	19
	Development of Research Study Pretest and Posttest	20
	Content of Study's Pretest and Posttest	20
	Research Study Pretest	20
	Research Study Posttest	20
	Development of Instructor and Student Questionnaires	21
	Instructor Questionnaire	21
	Student Questionnaire	22
	Development of Student Competency Records	22
	Selection of Ability Test	23
	Appropriateness of the Test	23
	Validity and Reliability of the Quick Word Test	24
	Objectivity and Administration of the Quick Word Test	24
	Human Subject Clearance	25
	Instructor Training	26
	IDECC Instructor Training Objectives	27
	Traditional Instructor Training Objectives	28

TABLE OF CONTENTS
(CONTINUED)

CHAPTER		PAGE
	Procedures of the Experimental Study	28
	Close of Workshops	29
	Collection of Data	29
	Mailing Procedures	30
	Maintenance of Records	30
	Treatment of the Data	30
	Scoring the Research Study Pretests and Posttests	30
	Scoring Quick Word Tests	31
	Coding Demographic Data	31
	Key Punching	32
	Analysis of Data	32
3	ANALYSIS AND INTERPRETATION OF THE DATA	34
	Research Study Pretest	35
	Description of the Sample	36
	Student Variables	37
	Ability	37
	Student Educational Level	37
	Student Enrollment in High School Distributive Education	39
	Student Training in "Recruitment, Selection and Training"	41
	Student Employment	43
	Student Related Work Experience	45
	Student Supervisory Experience	45
	Student Sex	48
	Student Age	50
	Instructor Variables	50
	Instructor Age	50
	Instructor Years of Teaching	53
	High School Distributive Education Teaching	55
	Instructor Post Secondary Distributive Education Teaching Experience	57
	Instructor Teaching Experience in Other Areas of Distributive Education	59
	Instructor's Highest Degree	59
	Instructor Work Experience Related to Marketing and Distribution	63
	Dependent Variable	63
	Analysis of Covariance	65
	Related Work Experience in Combination with Teaching Approach	72
	Teaching Approach	72

TABLE OF CONTENTS
(CONTINUED)

CHAPTER		PAGE
	Ability	74
	Schools	74
	Summary	74
4	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	76
	Summary of the Problem	76
	Research Methodology	79
	Major Findings and Conclusions	81
	Secondary Research Questions	82
	Question - 1	82
	Question - 2	83
	Primary Research Question	84
	Recommendations for Further Research	86
BIBLIOGRAPHY		87
APPENDIX		90
A.	Unit of Instruction Outline	90
B.	Reference Information for Competencies from the Post Secondary IDECC System	92
C.	Objectives and Resources Utilized in the Experimental Study	94
D.	Letter and Reference Form to Distributive Education State Supervisors	97
E.	Letter and Response Form to Post Secondary Instructors	100
F.	Letter and Response Form to Instructors Who Wish to Participate in the Experimental Study	103
G.	Master List of Multiple Choice Test Questions	107
H.	Experimental Study Pretest	126
I.	Experimental Study Posttest	134
J.	Instructors Questionnaire	141
K.	Student Questionnaire	143
L.	Competency Record	146
M.	Human Subjects Approval and Related Materials	148
N.	IDECC and Traditional Workshop Agenda	160
O.	IDECC Instructors "Orientation to IDECC" Learning Activity Package	163
P.	Examples of a Competency Package Review Sheet	174
Q.	Traditional Instructors Handbook	176
R.	IDECC Instructors Handbook	224

LIST OF TABLES

TABLE		PAGE
1	Group Pretest Mean Scores by Teaching Approaches	36
2	Numbers, Means and Standard Deviations of Student General Mental Ability by Class and Teaching Approaches	38
3	Numbers, Means and Standard Deviations of Student Educational Level by Class and Teaching Approaches	40
4	Numbers, Means and Standard Deviations of Students Enrollment in High School Distributive Education by Class and Teaching Approaches	42
5	Numbers and Percentages of Students' Previous Training in Recruitment, Selection and Training by Class and Teaching Approaches	44
6	Numbers and Percentages of Employed Students by Class and Teaching Approaches	46
7	Numbers, Means and Standard Deviations of Student Related Work Experience by Class and Teaching Approaches	47
8	Numbers and Percentages of Students' Supervisory Experience by Class and Teaching Approaches	49
9	Numbers and Percentages of Male and Female Students by Class and Teaching Approaches	51
10	Numbers, Means and Standard Deviations of Students Age by Class and Teaching Approaches	52
11	Frequency, Frequency Percentage, and Cumulative Percentage of Instructors' Age Range by Teaching Approaches	54
12	Frequency, Frequency Percentage, and Cumulative Percentage of Instructors' Years of Teaching Experience by Teaching Approaches	56
13	Frequency, Frequency Percentage, and Cumulative Percentage of Instructors' Years of Teaching High School Distributive Education by Teaching Approaches	58

LIST OF TABLES
(CONTINUED)

TABLE		PAGE
14	Frequency, Frequency Percentage, and Cumulative Percentage of Instructors' Years of Teaching Post Secondary Distributive Education by Teaching Approaches	60
15	Frequency, Frequency Percentage, and Cumulative Percentage of Instructors' Years of Teaching in other Areas of Distributive Education by Teaching Approaches	61
16	Frequency, Frequency Percentage, and Cumulative Percentage of Instructors' Highest Degress by Teaching Approaches	62
17	Frequency, Frequency Percentage, and Cumulative Percentage of Years of Instructor Work Experience Related to Marketing and Distributive Education by Teaching Approaches.	64
18	Numbers, Means and Standard Deviations of Student Post Test Scores by Class and Teaching Approaches	66
19	Full Model Analysis of Covariance for Sources of Variance with Degrees of Freedom, Partial Sum of Squares, F Value and Probability Level	67
20	Summary Table for Analysis of Covariance of Full Model Consisting of 40 Sources of Variance	68
21	Summary Table for Analysis of Covariance of Restricted Model Consisting of 13 Sources of Variance	70
22	Restricted Model Analysis of Covariance for Selected Sources of Variances with Degrees of Freedom, Sum of Squares, F Value and Probability Level	71

LIST OF FIGURES

FIGURE		PAGE
1	A flowchart of the IDECC systematic teaching approach.	15
2	A graphic representation of interaction between work experience related to recruitment, selection and training and teaching approaches.	73
3	A graphic representation of experimental study's posttest scores over general mental ability.	75

CHAPTER 1

INTRODUCTION AND BACKGROUND OF THE STUDY

The Interstate Distributive Education Curriculum Consortium (IDECC) is an organization of twenty-three states that develops competency-based curriculum materials for distributive education based upon tasks performed in over 100 occupations within the field of marketing and distribution. The basic system was developed in the early 1970's.

The original IDECC system consisted of 500 Learning Activity Packages (LAPs) based upon the 983 competencies identified in a study completed by Lucy Crawford (1967), "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education." Each LAP contained the following components:

1. Pretest
2. Objectives
3. Learning Activities
4. Handouts (learning resources)
5. Learning Manager's Guide
6. Pretest Key
7. Posttest
8. Posttest Key

Williams (1977) reported:

> The Consortium adopted an evaluation model for the field testing of learning activity packets (Lucas et al., 1976, p. 2). Instruments were designed for measuring

> student achievement in all competencies and student/teacher attitudes toward the LAP method of instruction. Specifically, information was gathered regarding IDECC system use in terms of: effectiveness, efficiency, adequacy of learning activities, LAP format, facility, congruence between objectives and test questions, availability of reading resources, educational enfranchisement, a comparison of LAP instruction to traditional instruction, adequacy of objectives, time factors, clarity of directions, student interest level, and student/teacher attitudes toward LAPs. Analysis of the data revealed a high degree of success for the LAP method of instruction (Lucas et al., 1974, p. 2). The field-test study provided input for final revisions of the learning activity packets. (p. 3)

Although information concerning effectiveness of the LAPs and comparison of LAP instruction to traditional instruction was gathered through the field test process, experimentation was not involved.

In 1976, IDECC was awarded a grant under U.S.O.E. Part C to adapt the original IDECC system to the post secondary and other levels. The project, entitled Development and Validation of Competency-Based Instructional Systems for Adult, Post-Secondary, Special Needs, and Entrepreneurship Via the IDECC System, was completed in March, 1978.

The study contained in this report, was conducted in order to utilize new post secondary IDECC curriculum materials to evaluate through experimental research the effectiveness of the post secondary IDECC systematic teaching approach. This study was intended to compare student achievement resulting from learning by the IDECC systematic teaching approach to the student achievement obtained by the traditional teaching approach.

Need and Purpose for the Study

In February, 1978, the IDECC executive committee adopted the following mission statement:

> The role of IDECC is to develop and disseminate systematic approaches for planning, organizing, directing and evaluating distributive education curricula for specific occupations in marketing and distribution. Further, IDECC curricula will be competency-based -- including materials for testing, content documents, learning activities, behavioral objectives and related support materials.

In accordance with this mission and in order to provide the most effective competency-based materials for post secondary distributive education possible, a study was needed to determine the effectiveness of the newly-adapted IDECC system at the post secondary level. Do students enrolled in post secondary distributive education courses learn better by using the post secondary IDECC systematic approach? To answer this question, a comparison of achievement was made between the post secondary IDECC systematic approach and the traditional approach of instruction.

A thorough review of the literature, including mechanized information system searches through ERIC and Computerized Dissertation Abstracts, uncovered no research that compared instructional approach in post secondary distributive education.

The purpose of this study was to provide information to IDECC, Inc. for use in improving future curriculum development and systematic procedures in the area of post secondary distributive education. Furthermore, this information will be of use in future efforts to improve post

secondary learning activity packages, especially, the post secondary IDECC systematic approach of instruction.

Statement of the Problem

This study was designed to investigate the primary research question: Does teaching approach, after controlling for school effect and selected student variables, contribute significantly to student achievement based on a cognitive measure of recruitment, selection and training?

If yes, will there be a significant difference between the achievement of post secondary students who learn by the IDECC post secondary systematic teaching approach and post secondary students who learn by the traditional teaching approach?

Furthermore, this study was designed to investigate the secondary research questions:

1. What proportion of the variance of student achievement is accounted for by the following sources of variance?

   Variable X_1: Teaching Approach

   Variable X_2: Student Ability

   Variable X_3: Student Educational Level

   Variable X_4: Student Enrollment in High School Distributive Education

   Variable X_5: Student Training in Recruitment, Selection and Training

   Variable X_6: Student Current Employment

   Variable X_7: Student Related Work Experience

   Variable X_8: Student Supervisory Experience

Variable X_9: Student Sex

Variable X_{10}: Student Age

Variable X_{11}: School

Variable X_2 by X_4: Student Ability by Student Enrollment in High School Distributive Education

Variable X_2 by X_7: Student Ability by Student Related Work Experience

Variable X_2 by X_8: Student Ability by Student Supervisory Experience

Variable X_2 by X_{10}: Student Ability by Student Age

Variable X_2 by X_1: Student Ability by Teaching Approach

Variable X_4 by X_1: Student Enrollment in High School Distributive Education by Teaching Approach

Variable X_1 by X_5: Teaching Approach by Student Training in Recruitment, Selection and Training

Variable X_1 by X_6: Teaching Approach by Student Current Employment

Variable X_7 by X_1: Student Related Work Experience by Teaching Approach

Variable X^1 by X_8: Teaching Approach by Student Supervisory Experience

Variable X_1 by X_9: Teaching Approach by Student Sex

Variable X_{10} by X_1: Student Age by Teaching Approach

Variable X_2 by X_2: Student Ability by Student Ability

Variable X_4 by X_4: Student Enrollment in High School Distributive Education by Student Enrollment in High School Distributive Education

Variable X_7 by X_7: Student Related Work Experience by Student Related Work Experience

Variable X_{10} by X_{10}: Student Age by Student Age

Variable X4 by X_3: Student Enrollment in High School Distributive Education by Student Educational Level

Variable X_7 by X_3: Student Related Work Experience by Student Educational Level

Variable X_4 by X_5: Student Enrollment in High School Distributive Education by Student Training in Recruitment, Selection, and Training

Variable X_4 by X_8: Student Enrollment in High School Distributive Education by Student Supervisory Experience

Variable X_5 by X_8: Student Training in Recruitment, Selection and Training by Student Supervisory Experience

Variable X_{10} by X_5: Student Age by Student Training in Recruitment, Selection and Training

Variable X_7 by X_6: Student Related Work Experience by Student Current Employment

Variable X_6 by X_8: Student Current Employment by Student Supervisory Experience

Variable X_6 by X_9: Student Current Employment by Student Sex

Variable X_{10} by X_6: Student Age by Student Current Employment

Variable X_7 by X_8: Student Related Work Experience by Student Supervisory Experience

Variable X_7 by X_{10}: Student Related Work Experience by Student Age

Variable X_{10} by X_8: Student Age by Student Supervisory Experience

2. Which of the above sources of variance contribute significantly to the achievement of post secondary students, based on a measure of their knowledge of recruitment, selection, and training?

Assumptions

Assumptions upon which this study were based are as follows:

1. The subjects were administered the study instruments and answered them independently, without the aid of resources or classmates.
2. The subjects were provided either the experimental or traditional treatment as prescribed and explained to the instructors.
3. The student competency records were completed accurately by the instructors using the post secondary IDECC systematic approach.
4. The IDECC pretests and posttests were valid and reliable.

Delimitations of the Study

The study involved two approaches to instruction, the IDECC systematic approach and the traditional approach. The IDECC approach may be defined as the steps a student follows to learn the competencies determined as necessary to perform in a specified occupation. For purposes of this study, the IDECC approach was delimited to exclude the process of identifying required competencies. The treatment only included the IDECC systematic approach of instruction used to teach the same fourteen competencies to all students in the experimental group. Competencies based upon individual career objectives were not determined but, rather, all experimental group students were involved in learning the same competencies.

Furthermore, even though the post secondary IDECC system at the time of the study had materials to develop 520 competencies, this study was delimited to the development of fourteen competencies.

The control group of this study received the instruction by use of the traditional approach. The scope of traditional teaching in post

secondary distributive education that was to be considered as the control treatment was determined by the control group instructors. Traditional teaching was defined as possessing the following characteristics: (a) completion of the content is based on the amount of time which the students are exposed to the subject matter, (b) usually test book oriented, (c) all students in the class are exposed to the same content and quantity of materials, (d) instruction tends to be instructor centered, (e) the instructor determines the objectives and usually does not make them public, (f) usually group instruction utilizing the lecture method, (g) the instructor is considered the main source of knowledge, and (h) the environment of the class is more structured and conforms to the guidelines within the traditional institution in which it operates. Therefore, the control treatment was delimited to the above characteristics.

The content which pertained to the subject matter of recruitment, selection, and training was incorporated into the classes taught in the 1978 spring semester or quarter.

The 520 competencies upon which the post secondary IDECC system is based include competencies within the cognitive, affective, and psychomotor domains. This study involved only the cognitive domain. Competencies within the affective and psychomotor domains were not included.

Since the investigators were mostly interested in cognitive achievement of the students, student and instructor attitudes toward the instructional approach were not determined.

This study was not meant to be an evaluation of the entire post secondary IDECC system. It was a first attempt at determining the

effectiveness of the IDECC systematic approach of instruction which involves the use of selected post secondary learning activity packages consisting of pretests, objectives, learning activities, instructional materials, and posttests as a systematic procedure to assist post secondary students in learning competencies.

Limitations of the Study

Six limitations confronted this study. First, the population of the study was those post secondary distributive education classes which were available to the researchers. In other words, interested instructors volunteered to participate in the study. Random selection occurred from those classes taught by the volunteer instructors. Therefore, the findings can only be generalized to the volunteer classes from which the sample was drawn. The study was limited to the extent that classes may not be representative of the population of post secondary distributive education classes.

Another limiting factor was that subjects were not randomly assigned to classes. However, the intact classes were randomly assigned to groups and treatments. Furthermore, based upon the independent variable of entry knowledge of subject matter included in the study, the classes were found to be homogeneous based on a pretest.

Third, even though the research study pretest and research study posttest were examined for content validity and even though the reliability of these two instruments was studied, the results of the study are limited to the degree to which the responses were accurate and truly reflected the knowledge of the content held by the respondents.

Fourth, the study is limited to the truthfulness of the instructors' and students' answers to the questions on the Instructor Questionnaire and Student Questionnaire, respectively.

Although the Quick Word Test has been studied for validity and reliability this study was limited to the extent that the Quick Word Test accurately reflects the general mental ability of the subjects.

A final limitation of this study was that the results are valid only to the extent that the learning activity package pretests and post-tests are valid and reliable instruments.

Definition of Terms

Cognitive domain: that area of learning which deals with student knowledge (as opposed to attitudes or skills). It is one of three learning domains into which LAPs objectives are categorized (Williams, et al., 1978).

Competency: a skill, knowledge, or attitude required for a person to perform a task.

Competency-based instruction: instruction based on actual competencies required for a specific occupation (as opposed to subject-matter based curriculum).

Human Subject Clearance: the procedure that assesses the role of the subject of a research study and determines whether provisions have been made for the protection of the subjects' rights and welfare.

IDECC: The Interstate Distributive Education Curriculum Consortium is an organization of 23 states that develops and disseminates systematic approaches for planning, organizing, directing, and evaluating distributive education curricula for specific occupations in marketing and distribution. IDECC curricula is competency-based and includes materials for testing, content documents, learning activities, behavioral objectives and related support materials.

Instructional materials: materials included in a Learning Activity Package that accompany a learning activity. These may include handouts, transparency masters, detailed instructions, self-checks, etc.

Instructor questionnaire: questions asked of the instructors in order to obtain demographic data for analysis purposes.

LAP posttest: provided in each LAP, the posttest is designed to measure the student's mastery of the given objective after he/she has completed appropriate learning activities.

LAP pretest: the pretest is intended to identify those students who have the adequate knowledge, attitude, or skill and do not, therefore, need to complete a learning activity(ies).

Learning activities: written or performance exercises which develop attitude, knowledge, and/or skill competencies.

Learning activity package or competency package: a collection of materials designed to provide training toward a career goal in a distributive occupation. Each individual LAP contains a pretest, objectives, learning activities, instructional materials, posttest and test keys. These materials are designed to fulfill the objectives written from the competency statements.

Learning manager: the term refers to a new role for the traditional D.E. coordinator - that of an individual who organizes and coordinates learning experiences for the student. The role of instructor as a "disseminator of knowledge" is greatly reduced.

Objective: a specific statement which specifies the exact behavior or performance expected of a student.

Quick Word Test: a measure of verbal intelligence consisting of 100 multiple-choice vocabulary items developed by Edgar F. Borgatta and Raymond J. Corsini.

Post secondary IDECC system: a set of materials developed under a U.S.O.E. Part C grant in 1976 which adapted the original IDECC LAP learning activities to the post secondary level by providing learning activities and resources which are conducive to the 13th - 14th year for the supervisory and management level competencies.

Reliability: if a test has reliability, it will measure the same set of objects repeatedly and get similar results (Kerlinger, 1973, p. 442).

Research Study Posttest: the collection of test items developed by the researchers that was administered to all students in the study in order to determine the achievement of the control and experimental groups.

Research Study Pretest: the collection of test items developed by the researchers that was administered to all students in the study in order to determine equivalence of the experimental and control groups.

Student Competency Record: a listing of the competencies used in the experimental treatment of the study, which includes space for the learning manager and/or student to indicate whether or not the student passed the LAP pretest and which learning activities were completed by the student.

Student Questionnaire: questions asked of the students in order to obtain demographic data for analysis purposes.

Traditional approach: the approach that uses the following methods and techniques to convey information to the group of students: lectures, discussion, case studies, handouts, visual presentations using transparencies, role playing, and exercises. This highly structured approach is narrow, specific, and time-oriented based upon the topic.

Traditional lesson plan: a plan developed by the instructors of the sites selected for the traditional approach that included the unit title, time, objectives, materials and resources, method, learning activities, review, and summary.

Unit of instruction: the content, or subject matter, used for the treatments of this study. One list of objectives was used for the experimental and control treatments. The title of the unit was "Employee Recruitment, Selection, and Training."

Validity: a test is considered valid if it measures what it is supposed to measure (i.e., the objectives).

CHAPTER 2

METHODS AND PROCEDURES

Definition of Treatment

The experimental study involved two levels of treatment: (a) the post secondary traditional teaching approach and (b) the post secondary IDECC systematic teaching approach. IDECC was the experimental group and traditional was the control group.

IDECC Systematic Approach - Experimental Group

The IDECC systematic teaching approach is a competency based system of instruction based on a research study conducted by Lucy Crawford under a U.S.O.E. grant in 1967 (Crawford, 1967). The original IDECC system consists of identified attitudes, knowledge and skill competencies for 69 occupations in several occupational areas. The student selects a desired occupation, and develops the competencies required to reach their goal. The systematic teaching approach for developing those competencies provides a learning activity package which consists of a pretest, objectives for developing the competency, learning activities, handouts, and a posttest. The instructor becomes a learning manager as the students develop needed competencies at their own pace through the system shown in Figure 1.

The post secondary IDECC system is based on the supervisory and management level competencies of the original system with learning

SYSTEM FOR DEVELOPING A COMPETENCY

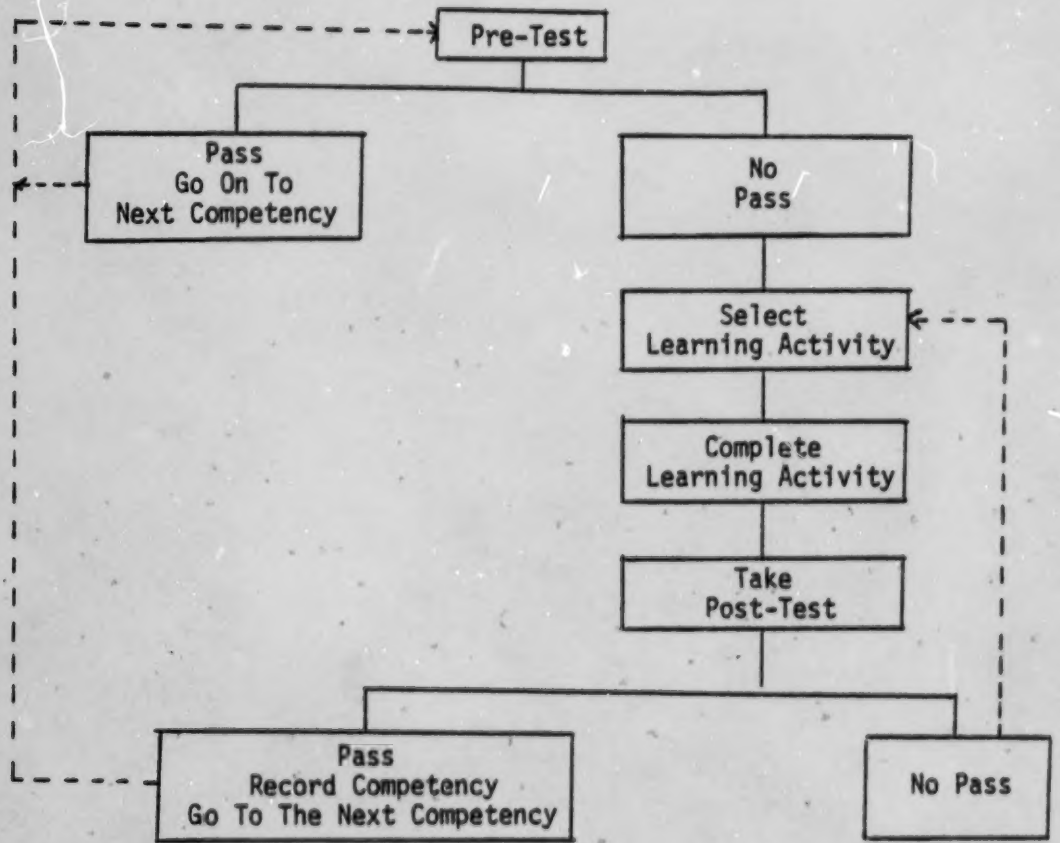

Figure 1. A flowchart of the IDECC systematic teaching approach.

activities and resources adapted to the post secondary level with retained resources brought up to date.

Traditional Approach - Control Group

The traditional teaching approach as defined by the traditional instructor participants of the study possess the following characteristics: (a) completion of the content is based on the amount of time which the students are exposed to the subject matter, (b) usually textbook oriented, (c) all students in the class are exposed to the same content and quantity of material, (d) instruction tends to be instructor centered, (e) the instructor determines the objectives and usually does not make them public, (f) usually group instruction utilizing the lecture method, (g) the instructor is considered the main source of knowledge and, (h) the environment of the class is more structured and conforms to the guidelines within the traditional institution in which it operates.

Selection of Content

The content for instruction in the study was based on the following procedures; (a) sites which volunteered to be a candidate for final selection were contacted to determine the courses which would be taught during the 1978 spring semester or quarter (see population and sample section of the report for selection of sites), (b) sites which were teaching similar courses were placed in a pool, (c) an outline consisting of recruitment, selection, and training was devised based on similar courses such as human relations, personnel management, supervision, etc. (see Appendix A for outline), (d) the outline was sent to those sites which were placed in the pool, and (e) sites which could teach the

content in their course during the 1978 spring quarter or semester were identified as final candidates for random selection.

Development of Instructional Materials

IDECC instructional materials. The instructional materials for the experimental group were 14 competency packages which were adapted from the original IDECC system to the post secondary level in the area of recruitment, selection and training of personnel. The experimental group was to utilize the 14 learning activity packages while following the systematic teaching approach of the IDECC system (see Appendix B for reference information).

Traditional instructional materials. The traditional instructional materials for the unit, "Recruitment, Selection and Training," were developed by the instructors of the sites randomly assigned to utilize the traditional teaching approach. A workshop was held previous to the experiment for the traditional instructors. The unit outline, objectives, and resources were presented to the instructors for the development of the lesson plans for instruction of the unit. Objectives and resources were identical to those used by the IDECC experimental group (see Appendix C for objectives and resource list). Within the workshop structure, each instructor was responsible for a segment of the unit by developing a lesson plan. All the lesson plans were approved by a consensus of the instructors. Handouts, transparencies and case studies were identified and developed as supporting materials to the unit (see Appendix Q for lesson plans and supporting materials).

Teaching Procedures

IDECC teaching procedures. The IDECC teaching procedures for the unit followed the IDECC systematic approach. Each student took the pretest before being exposed to an activity. The pretest determined the need for the student to develop the competency. If the student proved to possess the competency, the student moved on to the pretest of the next competency and the same procedure followed for the remaining competencies. If the results of the pretest determined the need for the student to develop the competency, the student or instructor selected the learning activity and the student proceeded to develop the competency by completing a selected learning activity. Once the student had developed the competency as determined by mastery of the posttest, the student moved to the next competency and repeated the procedures. Each student maintained a competency record which indicated; (a) pass or no pass on the pretest, (b) activities completed if any, and (c) the time it took to complete the required components of the package.

Traditional teaching procedures. The procedures for teaching the traditional groups followed the definition of traditional teaching as established by the instructors of the traditional sites (see the section of this chapter entitled, Traditional Approach - Control Group).

As previously described, the instructors taught the unit utilizing the same lesson plans which were developed in the workshop. The methods used for presenting the lessons were those which were representative of traditional definition: (a) lecture, (b) group instruction and, (c) case studies. Each traditional instructor used the techniques for presenting the lesson which was specified in the lesson plan.

Population and Sample

The population for this experimental study was identified by contacting the state supervisor of distributive education for each of the fifty states and requesting the recommendation of potential experimental sites (see Appendix D for letter and reference form). Once these sites were identifed, letters were sent to approximately 150 instructors explaining the study and soliciting their possible participation (see Appendix E for instructor letter and response form). Volunteer sites were then contacted to determine the feasibility of implementing the proposed unit of recruitment, selection and training into their course to be taught in the spring of 1978. Twenty-eight sites indicated they could implement the unit into their course of study and thus became the population for the study (see Appendix F for letter and response form to instructors who wish to participate in the study). Therefore, 16 sites were randomly selected from the 28 sites, with one class from each site involved in the study. These intact classes made up the sample for the study. Once the sites were selected the classes were assigned to groups one and two by randomly drawing eight sites for the first group and the remaining sites made up the second group. A flip of a coin determined which method of teaching would be assigned to group one. IDECC became group one and traditional was group two. The study is quasi-experimental with the student as the unit of analysis. It was necessary to utilize the student as the unit of analysis due to the low number of available sites. The design of the study explained later in this chapter accounts

for the effect of the school on intact classes. The findings can be generalized only to the 28 sites from which the classes were selected.

Development of Research Study Pretest and Posttest

Content of Study's Pretest and Posttest

The content of the research study pretest and posttest was based on the objectives from the 14 competencies for the unit, "Recruitment, Selection and Training." Specifically, content was derived from the resources identified for both treatment groups. Therefore, 77 questions for the topic of recruitment, selection, and training of personnel were developed in multiple choice format with three choices for each question (see Appendix G for master list of multiple choice test questions).

Research Study Pretest

Test questions were sorted according to objectives. Approximately equal number of questions were drawn for each objective resulting in a total of 40 multiple choice questions for the research study pretest. The purpose of the pretest was to determine if the experimental and control groups were equivalent in their previous knowledge of recruitment, selection and training (see Appendix H for pretest).

Research Study Posttest

Once the pretest was administered, each item on the pretest was analyzed for discriminatory power. Those items showing the most discrimination were used in conjunction with the remaining test items in the original pool from which the pretest was drawn to make up a 40 item research study posttest (see Appendix I for posttest). Each posttest

score was used as the dependent variable, that is, a measure of achievement in the student's knowledge of recruitment, selection, and training.

Development of Instructor and Student Questionnaires

Questionnaires were developed to obtain demographic data on both the instructors and the students who were involved in the study. The variables identified through the questionnaire were used for descriptive purposes. In addition, the student variables were analyzed in relation to the post-test scores to determine which student variable contributed significantly to the posttest scores.

Instructor Questionnaire

The instructor questionnaire consisted of questions which allowed for description of the following variables (see Appendix J for instructor questionnaire):

1. Full or part time instructor
2. Age
3. Years of teaching
4. Years of teaching in the various levels of marketing and distributive education
5. Highest level of education
6. Non-teaching distributive education related work experience
7. Total years of non-teaching distributive education related work experience

Student Questionnaire

The variables of interest for analysis pertaining to the students consisted of the following characteristics (see Appendix K for student questionnaire):

1. Years of education completed
2. Years of high school distributive education
3. Previous training in the area of recruitment, selection, and training of personnel
4. Currently employed
5. Years of work experience related to the field of study
6. Supervisory experience
7. Field of study
8. Course title
9. Sex
10. Age

Development of Student Competency Records

Competency records were maintained by the instructor for each student participating in the IDECC experimental group. The competency record listed the 14 competencies involved in the study. In addition, there is a column in which the instructor indicated if the student passed the pretest. The third column allowed the instructor to record the activities the students completed and the final column requires the recording of the total time the student required to master the competency including pretest, activities, and posttest (see Appendix L for competency record).

Selection of Ability Test

It was decided to determine the general mental ability of the students involved in the study in order to analyze the effect of student's ability on the posttest score. A test was needed which was inexpensive, easy, and quick to administer and score. The Quick Word Test developed by Borgatta and Corsini in 1964 met this need with the following characteristics:

1. The Quick Word Test may be self-administered. Instructions are easily followed.
2. The test is contained within one page with an attractive and easy format.
3. The Quick Word Test is power centered, not time centered, thus relieving the time pressure.
4. The test can usually be completed in 8 to 10 minutes.
5. The test is sufficiently reliable.
6. The test has several forms appropriate for different levels of groups.
7. The test possesses validity. It correlates with wellknown tests at the same level that they correlate with each other.
8. The test is economical having only one page and being easily scored.

Appropriateness of the Test

The Quick Word Test has two basic forms, Level 1 and 2. Level 1 is appropriate for grades 7-12 and average adult groups, as indicated by F.E. Peacock Publishers, Inc., publisher of the Quick Word Test.

In determining the form to use with the post secondary level, the selection of Level 1 - Bm was made based on the recommendation made by

one of the authors, Edgar F. Borgatta. This recommendation was made due to the nature of the study and the subjects involved.

In addition, the level chosen was found to be quite appropriate for this study's sample after the subjects' educational levels were determined. The class means of students' education level ranged from just out of high school to between one and two years of post secondary education.

Validity and Reliability of the Quick Word Test

Validity of this instrument was established through a variety of investigations as reported in the Quick Word Test Manual. Concurrent validity was determined by correlating scores with other widely used tests. Correlation coefficients for concurrent validity ranged from .72 to .84. Tables showing these relationships can be found in the Quick Word Test Manual (Borgatta and Corsini, 1964).

Kuder-Richardson reliability for the level 1 Quick Word Test for grade 12 was found to be .91 (Borgatta and Corsini, 1964, p. 9). Furthermore, the split-half reliability coefficient for grade 12 was .93 (Borgatta and Corsini, 1964, p. 15).

Objectivity and Administration of the Quick Word Test

The Quick Word Test consists of 100 multiple choice items, each of which has four alternatives. Students merely darken with a pencil the block by the selected answer directly on the test itself. Time for completing the test varies between 10 and 20 minutes. No subjective questions are included. Scoring is done objectively with no judgments involved. Therefore, the Quick Word Test seemed to be objective in nature, relatively simple to administer, and required little time to complete.

Human Subject Clearance

Research conducted at the Ohio State University must be presented to a review committee which "assesses the role of the subject in the proposed activity and determines whether provisions have been made for the protection of the subjects' rights and welfare" ("A Digest of Human Subject Program Guidelines," The Ohio State University).

The policies of the university in regard to research, development, and related activities involving human subjects adhere to the following:

a. Participation on the part of the human subject must be voluntary and information which gained the subject's consent must be appropriate. Subjects are not obligated to participate in cases where educational experiences are encountered such as in a course of study and that appropriate alternatives will be provided in place of the experimental experience.

b. The risks must be acceptable in relation to the knowledge gained as a result of participation.

c. A qualified person must supervise the research and training activities which involve human subjects.

d. All research involving human subjects must receive prior approval of a committee. Research continuing past a year is subject to review.

A summary sheet required by the human subjects committee was completed and submitted for their review.

Instructors were directed to solicit student participation on a volunteer basis and were further instructed to orient the students on the conditions of the study through oral communications via a handout describing the purpose, confidentiality, testing and questionnaire techniques, and volunteer participation of the study.

Each subject and instructor signed a participation consent form which is currently on file with IDECC. It should be noted that no subject elected to withdraw from the study.

The human subjects committee approved the proposed research with the following conditions:

a. If the students are graded, they should be graded in comparison to other students in their same learning group or condition rather than in comparison to students in other learning groups or conditions.

b. The information that will be given by the teachers at the onset of the study must be submitted to the human subjects committee for review.

c. Other provisions must be made for students deciding not to participate or to transfer to another section if they so choose?

Once the committee was assured the above conditions would be met, approval was given to proceed with the study (see Appendix M for human subjects approval and related materials).

Instructor Training

Two workshops were held to orient and prepare the 16 instructors to participate in the experimental study (see Appendix N for IDECC and traditional workshop agenda). Each workshop, IDECC and traditional, consisted of eight instructors and was held separately for three days within a two week span of time. Each workshop was based on specific objectives according to the teaching approach to be utilized and the following objectives which were common to both the IDECC group and the traditional group:

a. To develop a knowledge of competency-based education and the IDECC system.

b. To develop a knowledge of the purpose of the experimental study.

c. To provide inservice on the mechanics of the study.

d. To become acquainted with the resources to be used with the unit of instruction.

Once common objectives were realized in each of the workshops, the content branched off to reach the objectives which were characteristic for each of the instructional approaches.

IDECC Instructor Training Objectives

Workshop objectives which were unique for the IDECC instructors were:

a. To develop the knowledge, attitude and skill competencies in order to utilize the IDECC system.

b. To become acquainted with the IDECC materials and resources to be utilized in the study.

c. To determine management techniques to be used for implementation of the competencies identified for the study.

d. To develop the knowledge and skill necessary for student orientation for IDECC.

e. To develop the knowledge and skill of maintaining student competency records.

The IDECC group was presented with an orientation to IDECC and was given a learning activity package to assist in developing their knowledge of the system (see Appendix O). Additional workshop activity involved a review and discussion of each of the 14 competency packages and resources in regard to possible implementation strategies (see Appendix P for an example of a competency package review sheet).

Further workshop instruction was given in relation to techniques of orienting the students to utilize the IDECC system and maintaining the required competency record for each student.

Traditional Instructor Training Objectives

Again there were objectives which were characteristic to the traditional group alone. The additional objectives which were reached in the traditional workshop were:

a. To define traditional teaching.

b. To develop learning activities to teach the objectives.

c. To develop lesson plans involving the learning activities.

Within the workshop structure, the traditional group of instructors came to a general consensus of the traditional teaching as defined in the beginning of Chapter 2. A unit outline on recruitment, selection and training and the same objectives and resources given to the IDECC group were also given to the traditional group (see Appendix C). Based on these objectives and resources the group developed lesson plans to teach the unit. Each instructor was responsible for a segment of the unit and developed the lesson plans with an agreement of the other instructors for the presentation of the lesson. Handouts, transparencies, and case studies were identified and developed as supporting materials to the unit (see Appendix Q for lesson plans and supporting materials).

Procedures of the Experimental Study

Each instructor for both methods of teaching, was expected to fulfill certain steps in order to proceed with the experimental study. Those steps were as outlined:

a. Orientation of students

b. Obtaining student signature on the human subjects consent form

c. Assignment of student numbers

d. Administration of the student questionnaire

e. Administration of the ability test

f. Administration of the study's pretest

g. Mailing to the researchers of items (b) through (f)

h. Teach unit of instruction

i. Administration of study's posttest

j. Mailing to the researchers the posttest and answer sheet

Close of Workshops

Upon completion of the workshops, instructors returned to their school to begin implementation of the instruction to which they were assigned.

Each instructor returned to their sites with lesson plans or competency packages, resources, and a handbook for conducting the experiment (see Appendix Q for Traditional Instructor Handbook and Appendix R for IDECC Instructor Handbook).

Constant correspondence was maintained in order to keep open communication between the sites and the researchers.

Collection of Data

The data was collected on site by the instructor and then mailed to the research office. Records were kept by the investigators on all incoming data.

Mailing Procedures

Ability tests, research study pretests, pretest answer sheets, questionnaires, and human subject consent forms were completed and returned to the research office by registered mail at the onset of the study. Upon completion of the unit, research study posttests, and answer sheets were mailed to the sites, administered by the instructors, and responses were returned to the researchers for compilation and analysis.

Maintenance of Records

Complete records were maintained by the investigators for all materials mailed to the research office.

Files for each site were kept which included all correspondence, human subject's clearance forms for subjects and instructors, completed questionnaires for both students and instructors, pretest and posttest answer sheets, and ability test answer sheets.

Records were maintained for each site which contained pretest, posttest and ability test scores, coded student variables and coded instructor variables. In addition, a master competency record was kept on all students who were involved in the IDECC group. The master competency record provides information for each student on the number of pretests passed and the activities completed.

Treatment of the Data

Scoring the research study pretests and posttests. All research study pretests and posttests were administered to the students by their

instructor and mailed by the instructors to the researchers. The tests were machine-scored at the Ohio State University Office of Testing and Evaluation. Spot checks were performed to assure accuracy of the machine scoring process. Computerized item analyses were run on the research study pretests and posttests.

The research study pretests were analyzed to determine if the classes using the post secondary IDECC systematic teaching approach had students with a similar level of knowledge toward the content of the unit of instruction as the classes using the traditional approach. Kuder-Richardson 20 reliability estimates of .544 for the IDECC group and .687 for the traditional group were determined for the pretest instruments. The research study posttests were also analyzed and revealed Kuder-Richardson 20 reliability estimates of .773 for the IDECC group and .719 for the traditional group.

Scoring Quick Word Tests. All Quick Word Tests were administered to the subjects by their instructors and returned by mail to the researchers. The Quick Word Tests were scored by the researchers and checked for accuracy.

The Quick Word Test was used in order to gain insight into the general mental ability of the subjects, so that the covariance in posttest scores due to ability could be determined. Spot checks were performed to assure accuracy of the scoring process.

Coding demographic data. Levels of the demographic variables were coded numerically for analysis. Data acquired from the instructors and students were coded and recorded on a form from which the computer data cards were key punched.

Key punching. The following items were key punched onto a data card for each student:

class identification number

instructional mode

research study posttest student score

"Quick Word Test" student score

student education level - number of years

student high school D.E. - number of years

student training in recruitment, selection, and training - number of years

student employed or not employed

student related work experience - number of years

student supervisory experience - yes or no

male or female

student age - number of years

Analysis of Data

Condescriptive statistics were derived by utilizing the Statistical Package for the Social Sciences. These statistics were used to explain the students and instructor variables (Nie, et al., 1970, p. 185).

A general linear model procedure from the Statistical Analysis System was utilized to analysis the data (Barr, Goodnight, Sall, and Helwig, 1976). The general linear model procedure was first utilized with a full model design to determine the proportion of the total variance of the dependent variable score accounted for by 40 sources of variance as identified in Chapter 1. Specifically, each source of

variance while controlling for all other independent variables was entered last in the general linear model. This analysis of covariance by regression identified the partial sum of squares which could be attributed to each source of variance. Therefore, variance due to main effects, interactions, and squared terms were tested for their collective and separate statistical significance based on their contribution to the variation of the dependent variable.

Further analysis of the data utilized a restricted model design based on the outcome of the full model design analysis. The purpose of using the restricted model design analysis was to analyze the independent variables which contributed the most to the variance of the dependent variable without the loss of approximately five percent of the variance accounted for by the full model. The restricted model procedure allowed the investigators to analyze the separate statistically significant contribution of independent variables to the variation of the dependent variable.

CHAPTER 3

ANALYSIS AND INTERPRETATION OF THE DATA

The purpose of this chapter is to analyze and interpret the data collected during the investigation of the following primary research question:

Does teaching approach after cortrolling for school effect and selected student variables contribute significantly to student achievement based on a measure of knowledge of recruitment, selection, and training?

If yes, will there be a significant difference between the achievement of post secondary students who learn by the IDECC post secondary systematic teaching approach and post secondary students who learn by the traditional teaching approach.

In addition, this study was designed to investigate the secondary research questions:

1. What proportion of the variance of student achievement is accounted for by the sources of variance identified in Chapter 1?
2. Which of the identified sources of variance, contribute significantly to the achievement of post secondary students based on a measure of their knowledge of recruitment, selection, and training?

In order to investigate these questions, a quasi-experimental study was conducted utilizing 16 post secondary classrooms. The 16 classrooms were divided into two groups; (1) the experimental group utilizing the IDECC post secondary systematic teaching approach and (2) the control group utilizing the traditional teaching approach as their methods of instruction.

Each group of instructors, IDECC and traditional, attended a three day workshop for inservice in regard to the procedures for the study and the teaching approach to be utilized within each group.

Previous to the treatment, students in both groups were tested for ability and prior knowledge of "Recruitment, Selection, and Training."

Research Study Pretest

The pretest administered prior to the treatments was utilized to determine if there was a significant difference in the knowledge of "Recruitment, Selection, and Training," between the IDECC-experimental group and the traditional-control group. The test was a 40 item multiple choice instrument with a possible score of 40.

The IDECC group scored an overall mean of 29.56. The traditional group had a mean of 28.51 thus giving a mean difference of 1.05 as shown in Table 1. The standard deviations show little dispersion with a difference of .82.

Table 1

Group Pretest Mean Scores
by
Teaching Approaches

Teaching Approach	Pretest				
	n	Mean	Median	Mode	SD
IDECC	129	29.56	30	30	3.58
Traditional	115	28.51	29	32	4.40

A t-test was administered to determine if there was a significant difference in the pretest means of the IDECC and traditional groups. The t-test revealed that the pretest means were not significantly different based on the prior knowledge of the two groups, $t(244) = 1.960$, $p > .05$.

Description of the Sample

Questionnaires, as described in Chapter 2, were developed to obtain the demographic data in relation to the variables of interest for both the student and the instructor with the exception of the student mental ability. The ability was derived by utilizing the Corsini and Borgatta Quick Word Test. The test consists of 100 items with each item weighted one for a possible score of 100. All students within each of the two groups were administered the ability test.

Student Variables

Ability. Within the IDECC experimental group, site seven reflected the highest ability with a mean score of 69.44 and site two demonstrated the lowest ability with a mean score of 58.50. The mean scores of the IDECC group had a range of 10.94. The widest range of ability within the IDECC group was in site five with a standard deviation of 19.57. The lowest dispersion was in site three with a standard deviation of 8.52.

Site five with a mean score of 73.22 had the highest ability within the traditional group and site two the lowest with a mean score of 48.70. The traditional group ability had a range of 24.52. The widest deviation of ability in any one class of the traditional group was found in site seven with a standard deviation of 13.70. The lowest despersion was found in site six with a standard deviation of 10.09.

The means based on the total cases for each of the treatment groups were IDECC, 63.85, and traditional, 64.24 (see Table 2). The two group means were found to differ by only .39. This mean difference, .39, indicated that the general mental ability of the IDECC and traditional group was very similar.

Student educational level. The student educational level was reported by class means based on the actual number of school years completed.

As shown in Table 3, the class with the highest level of education among the IDECC group was in site eight with a class mean of 13.81 years of education. The lowest level of education within the IDECC group was in site four with a class mean of 12.22 years. The student educational level had a range of 1.59 among class means for the IDECC group. The

TABLE 2

NUMBERS, MEANS AND STANDARD DEVIATIONS OF
STUDENT GENERAL MENTAL ABILITY BY
CLASS AND TEACHING APPROACHES

Teaching Approach	Class	General Mental Ability		
		n	Mean	SD
IDECC	1	16	67.50	16.56
	2	4	58.50	14.71
	3	21	62.86	8.52
	4	9	64.22	18.45
	5	4	59.50	19.57
	6	33	62.52	12.77
	7	16	69.44	14.35
	8	26	62.04	11.11
Total		129	63.85	13.27
Traditional	1	32	65.00	12.35
	2	10	48.70	11.95
	3	10	55.50	12.96
	4	11	66.91	10.30
	5	9	73.22	12.09
	6	9	71.44	10.09
	7	21	64.52	13.70
	8	13	67.15	10.95
Total		115	64.24	13.36

largest dispersion for years of education was found in site six with a standard deviation of 1.05. Site five showed the most similarity in the level of education with a standard deviation of .00.

The highest class mean of education within the traditional group was in site two with a mean of 13.60. The lowest mean years of education for the traditional group was in site three with a mean of 12.10, leaving a range of means for the group of 1.50. The class which indicated the widest dispersion in the number of years was found in site 4 with a standard deviation of 1.27. The class which indicated the most similarity in educational level was in site three with a standard deviation of .32.

The means for educational level based on the total cases for each of the groups were 13.36, IDECC, and 12.92, traditional, which resulted in a difference of .44. This mean difference indicated that there was very little difference in the actual number of school years completed between the two groups.

Student enrollment in high school distributive education. Student enrollment in high school distributive education was reported by the actual number of years students were enrolled in a high school distributive education program.

As shown in Table 4, the highest number of mean years for involvement in a high school distributive education program among the IDECC sites was reported by site five and site seven with a mean of .50, which is equivalent to half a school year of distributive education. The lowest mean years reported was in site four with zero students having had high school

TABLE 3

NUMBERS, MEANS AND STANDARD DEVIATIONS OF STUDENT EDUCATIONAL LEVEL BY CLASS AND TEACHING APPROACHES

Teaching Approach	Class	Educational Level		
		n	Mean	SD
IDECC	1	16	13.50	.82
	2	4	12.50	.58
	3	21	13.38	.74
	4	9	12.22	.44
	5	4	13.00	.00
	6	33	13.30	1.05
	7	16	13.56	.73
	8	26	13.81	.90
Total		129	13.36	.92
Traditional	1	32	12.53	.62
	2	10	13.60	.52
	3	10	12.10	.32
	4	11	12.73	1.27
	5	9	13.44	.88
	6	9	13.44	1.24
	7	21	13.48	.68
	8	13	12.54	.52
Total		115	12.92	.90

distributive education, thus providing a mean range for the IDECC group of .50. The greatest deviation among students who have had high school distributive education was found in site five with a 1.0 standard deviation. The least amount of deviation was found in site four where there were no students with high school distributive education experience.

Within the traditional group, the highest mean years of high school distributive education was site two with .80 and the lowest was in site three with a mean of zero, thus providing a mean range of .80. The traditional group had their largest standard deviation of 1.00 in site five and the lowest standard deviation of zero in site three.

The mean for all cases in the IDECC group was .27 and the mean for the traditional group was .21. These means indicate only a .06 difference in the background of the two groups in regard to number of years of high school distributive education.

Student training in "Recruitment, Selection, and Training." Information was collected to determine the percentage of each class who had previous training in the content areas of the unit which was taught during the experimental study.

Within the IDECC group, the site with the highest percentage of previous training in the recruitment, selection, and training unit was 75.00% of the class in site five. The class with the lowest percentage of previous training was site two where the students have had no previous training; therefore, a range between the high and low class of the IDECC group was 75.00%.

TABLE 4

NUMBERS, MEANS AND STANDARD DEVIATIONS OF STUDENTS ENROLLMENT IN HIGH SCHOOL DISTRIBUTIVE EDUCATION BY CLASS AND TEACHING APPROACHES

Teaching Approach	Class	H.S. Distributive Education		
		n	Mean	SD
IDECC	1	16	.13	.34
	2	4	.25	.50
	3	21	.33	.58
	4	9	.00	.00
	5	4	.50	1.00
	6	32	.09	.53
	7	16	.50	.73
	8	26	.42	.81
Total		128	.27	.62
Traditional	1	32	.03	.18
	2	10	.80	.79
	3	10	.00	.00
	4	11	.27	.65
	5	9	.33	1.00
	6	9	.22	.67
	7	20	.30	.98
	8	12	.08	.29
Total		113	.21	.65

The class with the highest percentage of previous training among the traditional group was in site five with 33.33%. The lowest amount of previous training in the unit of instruction was found in sites two and three with no previous training. The traditional group class percentage of previous training in the unit revealed a range of 33.33% between the high and low sites.

Within the IDECC group, 28.57% of the students had previous training in the areas of recruitment, selection and training; whereas, only 13.39% of the traditional group students had previous training (see Table 5). This indicates that 36 students of the IDECC group had previous training in the unit of instruction while only 15 students in the traditional group had similar training. Thus, twice as many IDECC students had training in recruitment, selection and training.

Student employment. Each class was analyzed to determine the percentage of students who were currently employed within each site.

As shown in Table 6, within the IDECC group the highest percentage of student employment was 100% of the class in sites one, three, and four. The lowest employment percentage of a class within the IDECC group was found in site seven with 31.25% The range between the highest and lowest employment percentage for the IDECC group was 68.75%.

Within the traditional group, site four with 100% employed students was the highest. The lowest number of employed students within the traditional group was found in site six and seven with a percentage of 66.67% thus giving a range of 33.33% among the classes in the traditional group.

TABLE 5

NUMBERS AND PERCENTAGES OF STUDENTS' PREVIOUS TRAINING IN RECRUITMENT, SELECTION AND TRAINING BY CLASS AND TEACHING APPROACHES

Teaching Approach	Class	Training in Recruitment, Selection and Training	
		n	%
IDECC	1	15	40.00
	2	4	00.00
	3	20	30.00
	4	9	22.22
	5	4	75.00
	6	33	18.18
	7	16	18.75
	8	25	40.00
Total		126	28.57
Traditional	1	31	16.13
	2	10	00.00
	3	10	00.00
	4	11	18.18
	5	9	33.33
	6	9	11.11
	7	20	15.00
	8	12	8.33
Total		112	13.39

The percentage of students employed based on all cases within the IDECC group was 79.84% which was only slightly higher than the traditional group with 75.65% currently employed. Therefore, little difference was found between the teaching approach groups in the percentage of students currently employed.

Student related work experience. The number of years of work experience related to the unit of instruction was obtained for each student in the experimental study. A mean was determined for each site within the two teaching approaches.

Within the IDECC group, the class with the highest mean years of related work experience was site four with 5.89 years of experience. The lowest amount of related work experience was site seven, with 1.20 mean years, thus providing a range among IDECC sites of 4.69 years.

The traditional class which had the most related work experience was site five with 6.78 years and the traditional class which had the least amount of experience was site four with 1.10 years. The range for the traditional group was 5.68.

The means of all cases for each group were very close with 2.73 for the IDECC group and 2.32 for the traditional group. The close group means indicated that both groups had about the same amount of work experience related to the unit of instruction (see Table 7).

Student supervisory experience. Student supervisory experience was reported as a percentage of the students within each class who had supervisory experience.

TABLE 6

NUMBERS AND PERCENTAGES OF EMPLOYED STUDENTS BY CLASS AND TEACHING APPROACHES

Teaching Approach	Class	Employed Students	
		n	%
IDECC	1	16	100.00
	2	4	75.00
	3	21	100.00
	4	9	100.00
	5	4	75.00
	6	33	66.67
	7	16	31.25
	8	26	92.30
Total		129	79.84
Traditional	1	32	68.75
	2	10	80.00
	3	10	70.00
	4	11	100.00
	5	9	88.89
	6	9	66.67
	7	21	66.67
	8	13	84.62
Total		115	75.65

TABLE 7

NUMBERS, MEANS AND STANDARD DEVIATIONS OF STUDENT RELATED WORK EXPERIENCE BY CLASS AND TEACHING APPROACHES

Teaching Approach	Class	Related Work Experience		
		n	Mean	SD
IDECC	1	16	4.94	5.23
	2	3	1.33	1.53
	3	21	2.62	2.75
	4	9	5.89	3.59
	5	3	1.67	1.16
	6	27	1.41	2.52
	7	15	1.20	1.01
	8	25	2.92	2.33
Total		119	2.73	3.24
Traditional	1	26	1.54	1.73
	2	9	2.00	1.41
	3	10	1.50	1.43
	4	11	1.10	1.34
	5	9	6.78	8.24
	6	9	5.11	4.60
	7	21	1.43	1.57
	8	11	2.27	2.53
Total		106	2.32	12.01

As shown in Table 8, within the IDECC experimental group, site four contains the class with the largest percentage of students who have had supervisory experience with 77.78%. The sites with students with the least amount of supervisory experience are sites two, five and seven with 25%. This provides a range of 52.78% between the class with the highest percentage of supervisory experience and the class with the lowest amount of this type of experience.

Within the traditional group, the class which had the highest percentage of students with supervisory experience was found in site six. with 77.78%. The class with the lowest percentage of students with supervisory experience was in site seven with 21.05%. The high and low percentages within the traditional group reveals a range of 56.73%.

The percentage of all students who have had supervisory experience within each of the groups were very similar with 43.41% for the IDECC group and 40.74% for the traditional group.

Student sex. The sex of the students involved in the study was reported by percentage of male students and percentage of female students within each class and the overall percentage of each sex within a teaching approach.

Within the IDECC group, the class with the highest amount of males was in site two with 100%, thus giving site two the lowest percent of females with zero. The lowest percentage of males was found in site seven with 25% which had the highest amount of females with 75%. The range for the percentage of males and females in a class within the IDECC group was 75%.

TABLE 8

NUMBERS AND PERCENTAGES OF STUDENTS SUPERVISORY EXPERIENCE BY CLASS AND TEACHING APPROACHES

Teaching Approach	Class	Supervisory Experience	
		n	%
IDECC	1	16	75.00
	2	4	25.00
	3	21	47.62
	4	9	77.78
	5	4	25.00
	6	33	36.36
	7	16	25.00
	8	26	34.62
Total		129	43.41
Traditional	1	29	37.93
	2	10	30.00
	3	9	22.22
	4	11	63.64
	5	9	66.67
	6	9	77.78
	7	19	21.05
	8	12	33.33
Total		108	40.74

The traditional class which had the highest percentage of males was found in site seven with 66.67% males thus providing the lowest percent of females at 33.33%. The class with the lowest percent of males was in site three with 30.00% and a high of 70.00% females.

Overall, the IDECC group had 52.38% males and 47.62% females. The traditional group had 60.18% males and 39.82% females. These percentages show very little differences in the number of males and females between the two groups (see Table 9).

Student age. Students' ages are reported by class mean of midpoints of a three point range. Students were provided with ten age categories in which to indicate their age.

Within the IDECC group, the highest mean age was reported by the class in site one with a mean age of 31.25. The lowest mean age within this group was 19.00 in site two, thus providing a range of 12.25.

The class within the traditional group which shows the highest mean age was in site five with a mean age of 30.89. The lowest mean age was reported by site two with a mean of 19.30. The range within this group was 11.59.

As shown in Table 10, the ages of the two groups were very close with means of 23.12 and 23.23, IDECC and traditional respectively.

Instructor Variables

Instructor age. Instructor age was reported by the midpoint of a given age range for each of the instructors in the experimental study

TABLE 9

NUMBERS AND PERCENTAGES OF MALES AND FEMALE STUDENTS BY CLASS AND TEACHING APPROACHES

Teaching Approach	Class	Sex		
		n	% Males	% Females
IDECC	1	16	81.25	18.75
	2	4	100.00	00.00
	3	21	66.67	33.33
	4	9	66.67	33.33
	5	4	50.00	50.00
	6	31	41.90	58.10
	7	16	25.00	75.00
	8	25	40.00	60.00
Total		126	52.38	47.62
Traditional	1	31	64.52	35.48
	2	10	60.00	40.00
	3	10	30.00	70.00
	4	11	63.64	36.36
	5	9	55.56	44.44
	6	8	62.50	37.50
	7	21	66.67	33.33
	8	13	61.54	38.46
Total		113	60.18	39.82

TABLE 10

NUMBERS, MEANS AND STANDARD DEVIATIONS OF STUDENT AGE BY CLASS AND TEACHING APPROACHES

Teaching Approach	Class	Student Age		
		n	Mean	SD
IDECC	1	16	31.25	7.03
	2	4	19.00	0.00
	3	21	20.43	2.94
	4	9	27.67	8.28
	5	4	24.75	11.50
	6	33	22.64	4.49
	7	16	19.94	18.06
	8	26	21.69	4.31
Total		129	23.12	6.07
Traditional	1	32	23.09	7.37
	2	10	19.30	.95
	3	10	19.90	2.03
	4	11	26.64	6.62
	5	9	30.89	10.75
	6	9	28.89	6.45
	7	21	21.00	4.87
	8	13	20.62	3.38
Total		115	23.23	6.91

sites. Instructors were given ten categories from which to identify their age.

Table 11 shows the number of instructors which fall within a certain age range, the percentage of frequency and the cumulative percentage for all sites.

Within the IDECC group, the instructor with the highest age was 53. The instructor with the lowest age was 28, thus providing an age range of 25.

The instructor with the highest age in the traditional group was 58 and the instructor with the lowest age was 28. The age range within the traditional group was 30. As shown in Table 11, each of the groups were very similar with IDECC having a median age of 32.83 while the traditional median was 35.50. Thus the instructors' median age for the two groups were very close to the same age with a median difference of only 2.67 years.

Instructor years of teaching. The instructors' years of teaching was reported by number of years taught by each instructor participating in the study.

Table 12 provides the frequency of instructors who have an identified number of years of teaching experience. In addition, the frequency percentages and cumulative percentages are shown in the table. As indicated in Table 12, a wide dispersion in years of teaching experience was evident.

Within the IDECC group, one instructor had 31 years of teaching experience while three instructors had five years of teaching experience with a range of 26 years between the highest and lowest number of years.

TABLE 11

FREQUENCY, FREQUENCY PERCENTAGE, AND CUMULATIVE PERCENTAGE OF INSTRUCTORS' AGE RANGE BY TEACHING APPROACHES

Age Range	IDECC - Experimental			Traditional - Control		
	Frequency	Frequency Percentage	Cumulative Percentage	Frequency	Frequency Percentage	Cumulative Percentage
20-25	0	00.00	00.00	0	00.00	00.00
26-30	3	37.50	37.50	3	37.50	37.50
31-35	3	37.50	75.00	1	12.50	50.00
36-40	0	00.00	75.00	1	12.50	62.50
41-45	1	12.50	87.50	2	25.00	87.50
46-50	0	00.00	87.50	0	00.00	87.50
51-55	1	12.50	100.00	0	00.00	87.50
56-60	0	00.00	100.00	1	12.50	100.00
61-65	0	00.00	100.00	0	00.00	100.00
Totals	8	100.00		8	100.00	

Median of IDECC Instructors' Age: 32.83

Range of IDECC Instructors' Age: 25

Median of Traditional Instructors' Age: 35.50

Range of Traditional Instructors' Age: 30

54

Within the traditional group, 28 years was the highest number of years taught while three was the lowest number, thus providing a range in the number of years of teaching experience within the traditional group of 25 years.

The group medians for IDECC and traditional are six and nine respectively, thus showing the traditional group as having three years of teaching experience above the experience of the IDECC group (see Table 12).

High school distributive education teaching. Data was collected to determine the number of years each post secondary instructor had taught distributive education on the high school level.

The most common occurrence in both groups was for the instructor to possess no experience in teaching distributive education on the high school level. However, as shown in Table 13, a smaller percent, 37.50, of the IDECC instructors had zero years of experience than did the traditional instructors with 62.50 percent.

The highest number of years of teaching high school distributive education in the IDECC group was five years. Three sites, have zero years of experience, thus providing a range of high school distributve education teaching within the IDECC group of five years.

Of the traditional group, an instructor had seven years of high school distributive education teaching. Five of the sites had no experience in high school distributive education teaching, thus giving a range of seven years for high school teaching experience in distributive education.

TABLE 12

FREQUENCY, FREQUENCY PERCENTAGE, AND CUMULATIVE PERCENTAGE OF INSTRUCTORS' YEARS OF TEACHING EXPERIENCE BY TEACHING APPROACHES

Years of Teaching Experience	IDECC - Experimental			Traditional - Control		
	Frequency	Frequency Percentage	Cumulative Percentage	Frequency	Frequency Percentage	Cumulative Percentage
3	0	00.00	00.00	2	25.00	25.00
5	3	37.50	37.50	1	12.50	37.50
6	2	25.00	62.50	1	12.50	50.00
7	1	12.50	75.00	0	00.00	50.00
10	1	12.50	87.50	0	00.00	50.00
12	0	00.00	87.50	1	12.50	62.50
15	0	00.00	87.50	1	12.50	75.00
17	0	00.00	87.50	1	12.50	87.50
28	0	00.00	87.50	1	12.50	100.00
31	1	12.50	100.00	0	00.00	100.00
Totals	8	100.00		8	100.00	

Median of IDECC Instructors' Years of Teaching: 6

Range of IDECC Instructors' Years of Teaching: 26

Median of Traditional Instructors' Years of Teaching: 9

Range of Traditional Instructors' Years of Teaching: 25

The median years of high school distributive education teaching shows a difference of 2.5 between the two groups. This results from the traditional group having a median of 0 and the IDECC group having a median of 2.50 as shown in Table 13. This difference indicated that the IDECC group had more teaching experience on the high school level.

Instructor post secondary distributive education teaching experience. Post secondary teaching experience in distributive education was reported by the number of years of experience for each instructor.

The most frequent number of years of teaching experience in post secondary distributive education occurred for the IDECC group at one and five years; however, the frequency distribution for this group was fairly even ranging from one to eight years of experience.

The traditional group was a little more concentrated around three to five years of experience with three of the instructors having three years of experience and three instructors having five years of experience.

The instructor within the IDECC group who had the most experience in teaching post secondary distributive education had eight years of experience. The instructors with the least amount of experience had one year of teaching. These figures provide a range of seven years for post secondary teaching experience within the IDECC group.

The instructor within the traditional group with the greatest number of years of teaching post secondary distributive education had a total of 10 years. The instructor with the least amount of years had two years of experience, thus leaving a range of eight years of post secondary distributive education teaching within the traditional group.

TABLE 13

FREQUENCY, FREQUENCY PERCENTAGE, AND CUMULATIVE PERCENTAGE OF INSTRUCTORS' YEARS OF TEACHING HIGH SCHOOL DISTRIBUTIVE EDUCATION BY TEACHING APPROACHES

Years of Teaching High School Distributive Education	IDECC - Experimental			Traditional - Control		
	Frequency	Frequency Percentage	Cumulative Percentage	Frequency	Frequency Percentage	Cumulative Percentage
0	3	37.50	37.50	5	62.50	62.50
1	0	00.00	37.50	1	12.50	75.00
2	1	12.50	50.00	0	00.00	75.00
3	1	12.50	62.50	1	12.50	87.50
4	2	25.00	87.50	0	00.00	87.50
5	1	12.50	100.00	0	00.00	87.50
6	0	00.00	100.00	0	00.00	87.50
7	0	00.00	100.00	1	12.50	100.00
Totals	8	100.00		8	100.00	

Median of IDECC Instructors' Years of Teaching High School Distributive Education: 2.5

Range of IDECC Instructors' Years of Teaching High School Distributive Education: 5

Median of Traditional Instructors' Years of Teaching High School Distributive Education: 0

Range of Traditional Instructors' Years of Teaching High School Distributive Education: 7

The two groups, IDECC and traditional, had a similar number of years of teaching post secondary distributive education as shown in Table 14 with medians of 4.5 for the IDECC group and 4.0 for the traditional group.

Instructor teaching experience in other areas of distributive education. The post secondary instructor's teaching experience in other areas of distributive education rather than high school and post secondary was reported by actual number of years of other teaching experience.

As shown in Table 15, other types of teaching experience only occurred once in each group. One IDECC instructor had only two years of teaching experience in other areas of distributive education and one traditional instructor had seven years of this type of experience.

Instructor's highest degree. The instructor's degree was reported by the following codes: Doctorate = 4, Masters + 30 hours = 3, Master's = 2, and bachelor = 1.

The most frequent level of education to occur within the IDECC group was master's + 30 with five instructors having this status. The instructors within the traditional group most frequently held a master's degree.

Within the IDECC group, one instructor had a doctorate degree while two instructors held master's degrees. One instructor also had a doctorate degree within the traditional group with one instructor holding a bachelor's degree.

There was approximately 30 hours difference in the level of education of the two groups as indicated by the medians of 3(Master's + 30) for the IDECC group and 2(Master's) for the traditional group (see Table 16).

TABLE 14

FREQUENCY, FREQUENCY PERCENTAGE, AND CUMULATIVE PERCENTAGE OF INSTRUCTORS' YEARS OF TEACHING POST SECONDARY DISTRIBUTIVE EDUCATION BY TEACHING APPROACHES

Years of Teaching Post Secondary Distributive Education	IDECC - Experimental			Traditional - Control		
	Frequency	Frequency Percentage	Cumulative Percentage	Frequency	Frequency Percentage	Cumulative Percentage
1	2	25.00	25.00	0	00.00	00.00
2	1	12.50	37.50	1	12.50	12.50
3	0	00.00	37.50	3	37.50	50.00
4	1	12.50	50.00	0	00.00	50.00
5	2	25.00	75.00	3	37.50	87.50
6	1	12.50	87.50	0	00.00	87.50
8	1	12.50	100.00	0	00.00	87.50
10	0	00.00	100.00	1	12.50	100.00
Totals	8	100.00		8	100.00	

Median of IDECC Instructors' Years of Teaching Post Secondary Distributive Education: 4.5

Range of IDECC Instructors' Years of Teaching Post Secondary Distributive Education: 7

Median of Traditional Instructors' Years of Teaching Post Secondary Distributive Education: 4.0

Range of Traditional Instructors' Years of Teaching Post Secondary Distributive Education: 8

TABLE 15

FREQUENCY, FREQUENCY PERCENTAGE, AND CUMULATIVE PERCENTAGE OF INSTRUCTORS' YEARS OF TEACHING IN OTHER AREAS OF DISTRIBUTIVE EDUCATION BY TEACHING APPROACHES

Years of Teaching in Other Areas of Distributive Education	IDECC - Experimental			Traditional - Control		
	Frequency	Frequency Percentage	Cumulative Percentage	Frequency	Frequency Percentage	Cumulative Percentage
0	7	87.50	87.50	7	87.50	87.50
2	1	12.50	100.00	0	00.00	87.50
7	0	00.00	100.00	1	12.50	100.00
Totals	8	100.00		8	100.00	

Median of IDECC Instructors' Years of Teaching in Other Areas of Distributive Education: 0

Range of IDECC Instructors' Years of Teaching in Other Areas of Distributive Education: 2

Median of Traditional Instructors' Years of Teaching in Other Areas of Distributive Education: 0

Range of Traditional Instructors' Years of Teaching in Other Areas of Distributive Education: 7

TABLE 16

FREQUENCY, FREQUENCY PERCENTAGE, AND CUMULATIVE PERCENTAGE OF INSTRUCTORS' HIGHEST DEGREES BY TEACHING APPROACHES

Highest Level of Education	IDECC - Experimental			Traditional - Control		
	Frequency	Frequency Percentage	Cumulative Percentage	Frequency	Frequency Percentage	Cumulative Percentage
Bachelor	0	00.00	00.00	1	12.50	12.50
Master	2	25.00	25.00	5	62.50	75.00
Master + 30	5	62.50	87.50	1	12.50	87.50
Doctorate	1	12.50	100.00	1	12.50	100.00
Totals	8	100.00		8	100.00	

Median of IDECC Instructors' Highest Degree: Master + 30

Median of Traditional Instructors' Highest Degree: Master

Instructor work experience related to marketing and distribution. Related work experience was reported by the number of years of experience for each instructor in a site.

Three and four were the most frequent number of years of work experience related to Marketing and Distribution. The IDECC group had three instructors with four years of experience while the traditional group had three instructors with three years of related experience. As shown in Table 17, the rest of the IDECC instructors were fairly evenly distributed over two to 15 years of experience while the traditional group was distributed from three to 32 years of experience.

One instructor in the IDECC group had the greatest number of years of related experience, 15, for that group. The IDECC instructor who held the least amount of experience had two years of related work experience. This provided a range of 13 years of related work experience within the IDECC group.

Within the traditional group, one instructor had 32 years of related work experience. Three years was the minimum amount of related work experience held by three sites. The range among the traditional group for instructor related work experience was 29 years.

As shown in Table 17, there was very little difference in the median years of related work experience of the two groups. IDECC had a median of 4.5 years and tradtional had a slightly higher median at 5.0 years.

Dependent Variable

Student posttest scores were reported as the number of correct responses by the student on a 40 item multiple choice test.

TABLE 17

FREQUENCY, FREQUENCY PERCENTAGE, AND CUMULATIVE PERCENTAGE OF YEARS OF INSTRUCTOR WORK EXPERIENCE RELATED TO MARKETING AND DISTRIBUTIVE EDUCATION BY TEACHING APPROACHES

Years of Work Experience Related to Marketing & Distributive Education	IDECC - Experimental			Traditional - Control		
	Frequency	Frequency Percentage	Cumulative Percentage	Frequency	Frequency Percentage	Cumulative Percentage
2	1	12.50	12.50	0	00.00	00.00
3	0	00.00	00.00	3	37.50	37.50
4	3	37.50	50.00	1	12.50	50.00
5	1	12.50	62.50	0	00.00	50.00
6	0	00.00	62.50	1	12.50	62.50
7	1	12.50	75.00	0	00.00	62.50
8	1	12.50	87.50	0	00.00	62.50
13	0	00.00	87.50	2	25.00	87.50
15	1	12.50	100.00	0	00.00	87.50
32	0	00.00	100.00	1	12.50	100.00
Totals	8	100.00		8	100.00	

Median Years of IDECC Instructor Work Experience Related to Marketing and Distributive Education: 4.5

Range Years of IDECC Instructor Work Experience Related to Marketing and Distributive Education: 13

Median Years of Traditional Instructor Work Experience Related to Marketing and Distributive Education: 5.0

Range Years of Traditional Instructor Work Experience Related to Marketing and Distributive Education: 29

The class with the highest class mean score within the IDECC group was in site four with a mean of 32.78. The lowest class mean on the posttest occurred in site one with a mean of 25.63. This provides a range of 7.15.

Within the traditional group, the highest class mean was in site five with a mean of 33.11. The lowest class mean was in site two with a mean of 24.80, thus providing a range of 8.31.

As shown in Table 18, the group means for the IDECC and traditional group were very similar with a mean of 29.02 for the IDECC group and a mean of 30.39 for the traditional. These are raw score means with none of the preceeding variables taken into consideration.

Analysis of Covariance

When achievement scores are analyzed to determine how much variance teaching approach contributed to the research study posttest score, the secondary research question, identified in Chapter 1, must be answered: "What proportion of the variance is accounted for by other variables of interest?" Therefore, a total of 40 sources of variance was taken into consideration. An analysis of covariance by regression was performed involving the 40 sources of variance as presented in the full model in Table 19. By entering these sources of variance into the equation the full model accounts for 50.56% of the variance of the research study posttest scores, as indicated in the R-square column of Table 20.

The full model analysis revealed that schools (X_1), with a probability level of .0009, was the only source of variance which was

TABLE 18

NUMBERS, MEANS AND STANDARD DEVIATIONS OF STUDENT POST TEST SCORES BY CLASS AND TEACHING APPROACHES

Teaching Approach	Class	Post Test Scores		
		n	Mean	SD
IDECC	1	16	25.63	6.53
	2	4	29.75	4.79
	3	21	26.62	5.64
	4	9	32.78	3.73
	5	4	30.50	4.20
	6	33	29.79	4.27
	7	16	30.88	3.90
	8	26	29.27	4.65
Total		129	29.02	5.14
Traditional	1	32	31.69	3.42
	2	10	24.80	6.55
	3	10	27.30	1.57
	4	11	31.91	3.65
	5	9	33.11	2.48
	6	9	30.44	3.81
	7	21	32.14	3.25
	8	13	27.85	5.21
Total		115	30.39	20.24

TABLE 19

FULL MODEL ANALYSIS OF COVARIANCE FOR SOURCES OF VARIANCE
WITH DEGREES OF FREEDOM, PARTIAL SUM OF SQUARES,
F VALUE AND PROBABILITY LEVEL

Source	DF	Partial Sum of Squares	F Value	PR > F
X1	1	9.98815713	0.66	0.4167
X2	1	34.66879500	2.30	0.1313
X3	4	36.78764075	0.61	0.6555
X4	1	29.61745430	1.97	0.1628
X5	1	1.24021569	0.08	0.7745
X6	1	14.15571549	0.94	0.3338
X7	1	0.56940725	0.04	0.8461
X8	1	13.02173543	0.86	0.3539
X9	1	8.49891935	0.56	0.4537
X10	1	15.04188392	1.00	0.3192
School(X1)	14	594.80268087	2.82	0.0009*
X2*X4	1	19.84456079	1.32	0.2528
X2*X7	1	3.86441253	0.26	0.6132
X2*X8	1	0.00029904	0.00	0.9965
X2*X10	1	1.25953357	0.08	0.7728
X2*X1	1	23.56719705	1.90	0.1704
X4*X1	1	4.46379490	0.30	0.5869
X1*X5	1	3.82714993	0.25	0.6149
X1*X6	1	8.68800402	0.58	0.4487
X7*X1	1	55.38962368	3.68	0.0570
X1*X8	1	1.70476009	0.11	0.7370
X1*X9	1	0.06585549	0.00	0.9474
X10*X1	1	8.48817917	0.56	0.4540
X2*X2	1	7.85188428	0.52	0.4714
X4*X4	1	3.13001226	0.21	0.6491
X7*X7	1	9.51 06462	0.63	0.4274
X10*X10	1	10.36695108	0.69	0.4080
X4*X3	2	9.39542890	0.31	0.7325
X7*X3	3	27.18945775	0.60	0.6188
X4*X5	1	3.10993207	0.21	0.6502
X4*X8	1	15.31046328	1.02	0.3149
X5*X8	1	0.24113444	0.02	0.8995
X10*X5	1	0.97444866	0.06	0.7995
X7*X6	1	1.41827564	0.09	0.7593
X6*X8	1	3.89840002	0.26	0.6116
X6*X9	1	1.94591137	0.13	0.7197
X10*X6	1	19.04592133	1.26	0.2625
X7*X8	1	12.60636812	0.84	0.3617
X7*X10	1	27.27919994	1.81	0.1803
X10*X8	1	21.54817297	1.43	0.2335

* Statistically Significant

TABLE 20

SUMMARY TABLE FOR ANALYSIS OF COVARIANCE OF FULL MODEL CONSISTING OF 40 SOURCES OF VARIANCE

Source	DF	Sum of Squares	Mean Square	F Value	PR > F	R-Square
Model	59	2315.40506779	39.24415369	2.61	0.0001	0.504526
Error	151	2273.86507439	15.05870910			
Corrected Total	210	4589.27014218				

making a significant contribution to the posttest score. This outcome was as expected by the investigators due to the effect of intact classes used in this quasi-experimental study.

In order to investigate the research question concerning which of the 40 variables contributed significantly to the research study posttest score, the full model was restricted to 13 sources of variance with only a loss of 5.69% of the 50.45% accounted for in the full model. The restricted model revealed the following four sources of variance as making a significant contribution to the research study posttest score (see Tables 21 and 22).

X_1(Teaching approach). $F = 4.66$; $\underline{df} = 1/181$; $\underline{p} = .0322$.

X_2(Ability). $F = 28.39$; $\underline{df} = 1/181$; $\underline{p} = .0001$.

(X_1)(Schools). $F = 4.39$; $\underline{df} = 14/181$; $\underline{p} = .0001$.

$(X_7)(X_1)$ (Related work experience in combination with teaching approach). $F = 6.46$; $\underline{df} = 1/181$; $\underline{p} = .0119$.

The results of the restricted model indicated that teaching approach, after controlling for school effect and selected student variables, did make a significant contribution to student achievement based on a measure of knowledge of recruitment, selection and training.

However, of more importanct in answering the primary research question, there was a significant difference between the achievement of post secondary students who learn by the IDECC post secondary systematic approach and post secondary students who learn by the traditional teaching approach when the teaching approach interacted with student related work experience.

TABLE 21

SUMMARY TABLE FOR ANALYSIS OF COVARIANCE OF RESTRICTED
MODEL CONSISTING OF 13 SOURCES OF VARIANCE

Source	DF	Sum of Squares	Mean Square	F Value	PR> F	R-Square
Model	29	2054.18683945	70.83402895	5.06	0.0001	0.447606
Error	181	2535.08330273	14.00598510			
Corrected Total	210	4589.27014218				

TABLE 22

RESTRICTED MODEL ANALYSIS OF COVARIANCE FOR SELECTED SOURCES OF VARIANCES WITH DEGREES OF FREEDOM, SUM OF SQUARES, F VALUE AND PROBABILITY LEVEL

Source	DF	Partial Sum of Squares	F Value	PR > F
X1	1	65.23315290	4.66	0.0322 *
X2	1	397.69521381	28.39	0.0001 *
X3	4	63.30114166	1.13	0.3439
X4	1	35.63552552	2.54	0.1124
X5	1	7.59997463	0.54	0.4623
X6	1	0.05730715	0.00	0.9491
X7	1	1.92739841	0.14	0.7111
X8	1	20.52524589	1.47	0.2276
X9	1	5.27065580	0.38	0.5404
X10	1	12.88208707	0.92	0.3388
School(X1)	14	860.57658944	4.39	0.0001 *
X7*X1	1	90.49997023	6.46	0.0119 *
X2*X4	1	38.88886976	2.78	0.0974

* Statistically Significant

Related work experience in combination with teaching approach. As previously mentioned and indicated in Table 22 the related work experience and teaching approach interaction does contribute significantly to the achievement of students on the research study posttest.

The graph in Figure 2 , reveals that students with a low number of years of related work experience who are receiving instruction on recruitment, selection and training by the IDECC systematic teaching approach have a tendency to make lower scores on the research study post-test than did the traditional students with a similar low number of years of related work experience. However, as the number of years of related work experience increased for the IDECC group, their achievement scores increased. An opposite effect occurred with the students who received instruction by the traditional teaching approach. Traditional group students' with little related work experience achieved higher scores than did the IDECC students'; however, traditional students' achievement scores tend to decrease as their related work experience increased.

This interaction effect reveals that students with little related work experience may achieve higher scores when learning by the traditional teaching approach, but as the number of years of related work experience approaches approximately two and one half years, the student would have a tendency to achieve higher test scores when learning by the IDECC systematic approach.

Teaching approach. According to Kennedy, "if a significant interaction should prove to be disordinal, a formal interpretation of a significant main effect should not be attempted," (Kennedy, 1975, p. 650).

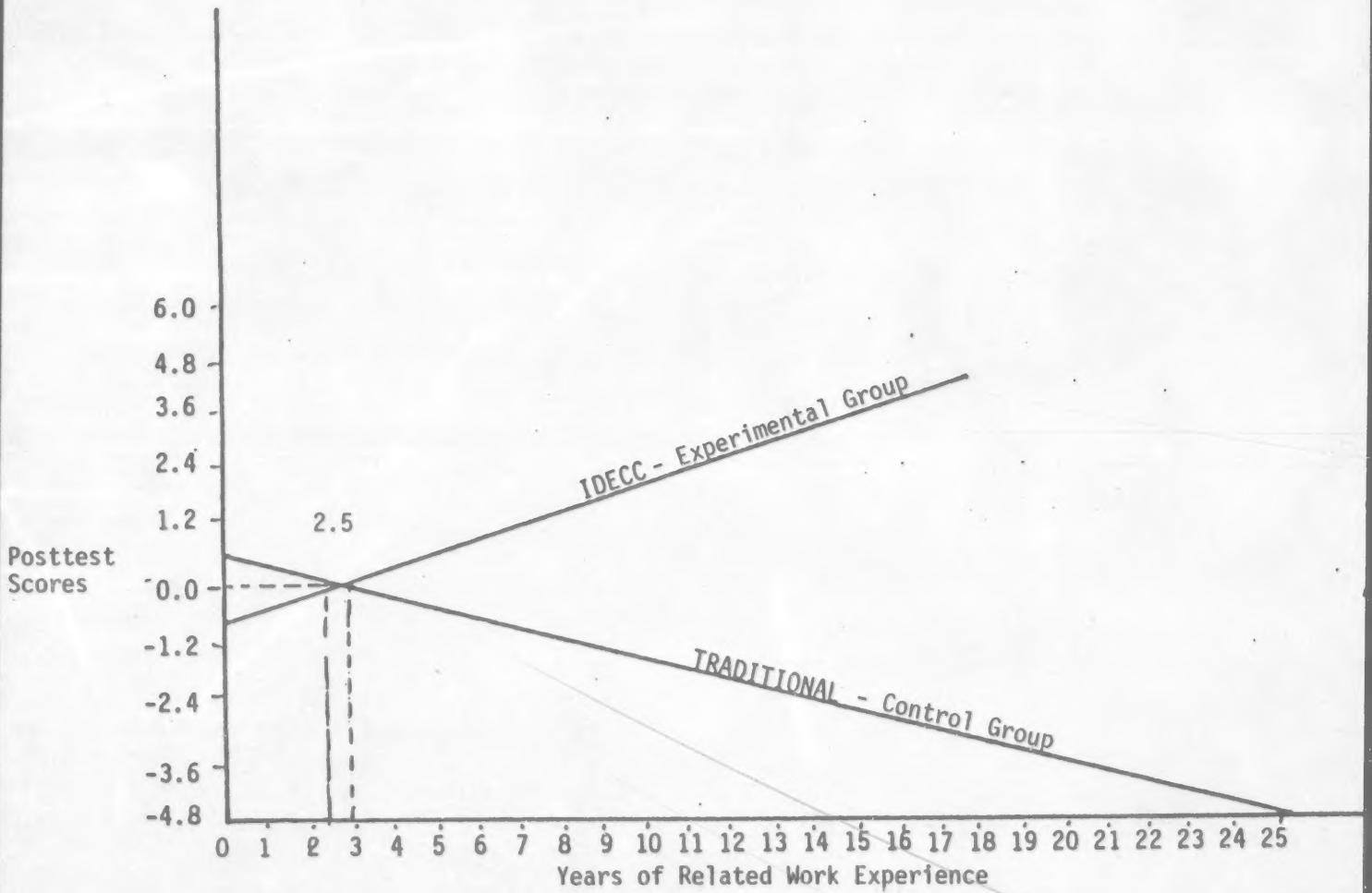

Figure 2. A graphic representation of interaction between work experience related to recruitment, selection and training and teaching approaches.

Since the main effect, teaching approach, in combination with related work experience revealed a disordinal significant interaction, (see Figure 2) investigators will not attempt to interpret the significant contribution of the main effect teaching approach.

Ability. As expected by the investigators of this study, when the ability of the students increased, the achievement level on the research study posttest also increased (see Figure 3).

Shown in the graph of posttest scores plotted over ability, students who have an ability of 64.03 can be expected to achieve a posttest score on the research study posttest of approximately 29.66.

Schools. The effect of schools made a significant contribution to the research study posttest score as would be expected due to the effect of intact classes used in this quasi-experimental study.

Summary

In this experimental study 50.45% of the variance was accounted for by 40 sources of variance.

When the model was reduced to 13 sources of variance with 44.76% of the variance accounted for, four sources contributed significantly to the research study posttest score.

Teaching approach did make a difference in the students' achievement, but can only be explained when in combination with the years of student work experience.

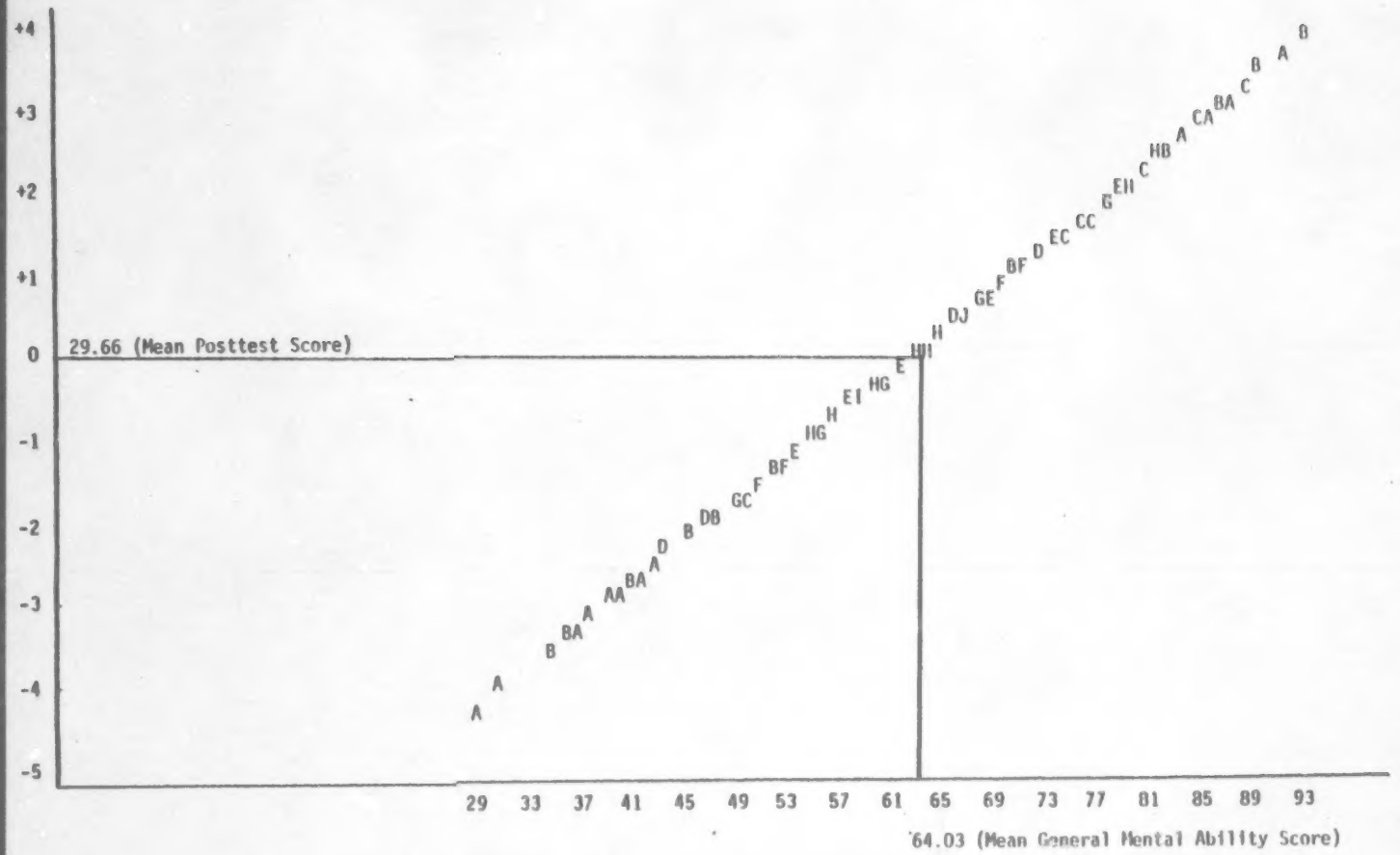

Figure 3. A graphic representation of experimental study's posttest scores over general mental ability.

75

CHAPTER 4

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The final Chapter 4 of this study will present:

1. A summary of the problem.
2. A review of the research methodology.
3. Major findings and conclusions.
4. Recommendations for further study.

Summary of the Problem

The need for this study resulted from the development of a new post secondary IDECC system. In order to provide the most effective competency-based materials for post secondary distributive education, a study was needed to determine the effectiveness of the newly adapted IDECC system at the post secondary level. The purpose of the study was to provide IDECC, Inc. with information which would be useful in improving future post secondary curriculum materials.

Therefore, this study was designed to investigate the primary research question:

Does teaching approach after controlling for school effect and selected student variable contribute significantly to student achievement based on a measure of knowledge of recruitment, selection and training?

If yes, will there be a significant difference between the achievement of post secondary students who learn by the IDECC post secondary

systematic teaching approach and post secondary students who learn by the traditional teaching approach?

Furthermore, this study was designed to investigate the secondary research questions:

1. What proportion of the variance of student achievement is accounted for by the following sources of variance?

   Variable X_1: Teaching Approach

   Variable X_2: Student Ability

   Variable X_3: Student Educational Level

   Variable X_4: Student Enrollment in High School Distributive Education

   Variable X_5: Student Training in Recruitment, Selection and Training

   Variable X_6: Student Current Employment

   Variable X_7: Student Related Work Experience

   Variable X_8: Student Supervisory Experience

   Variable X_9: Student Sex

   Variable X_{10}: Student Age

   Varialbe X_{11}: School

   Variable X_2 by X_4: Student Ability by Student Enrollment in High School Distributive Education

   Variable X_2 by X_7: Student Ability by Student Related Work Experience

   Variable X_2 by X_8: Student Ability by Student Supervisory Experience

   Variable X_2 by X_{10}: Student Ability by Student Age

   Variable X_2 by X_1: Student Ability by Teaching Approach

   Variable X_4 by X_1: Student Enrollment in High School Distributive Education by Teaching Approach

Variable X_1 by X_5: Teaching Approach by Student Training in Recruitment, Selection and Training

Variable X_1 by X_6: Teaching Approach by Student Current Employment

Variable X_7 by X_1: Student Related Work Experience by Teaching Approach

Variable X_1 by X_8: Teaching Approach by Student Supervisory Experience

Variable X_1 by X_9: Teaching Approach by Student Sex

Variable X_{10} by X_1: Student Age by Teaching Approach

Variable X_2 by X_2: Student Ability by Student Ability

Variable X_4 by X_4: Student Enrollment in High School Distributive Education by Student Enrollment in High School Distributive Education

Variable X_7 by X_7: Student Related Work Experience by Student Related Work Experience

Variable X_{10} by X_{10}: Student Age by Student Age

Variable X_4 by X_3: Student Enrollment in High School Distributive Education by Student Education Level

Variable X_7 by X_3: Student Related Work Experience by Student Educational Level.

Variable X_4 by X_5: Student Enrollment in High School Distributive Education by Student Training in Recruitment, Selection and Training.

Variable X_4 by X_8: Student Enrollment in High School Distributive Education by Student Supervisory Experience

Variable X_5 by X_8: Student Training in Recruitment, Selection and Training by Student Supervisory Experience

Variable X_{10} by X_5: Student Age by Student Training in Recruitment, Selection and Training

Variable X_7 by X_6: Student Related Work Experience by Student Current Employment

Variable X_6 by X_8: Student Current Employment by Student Supervisory Experiences

Variable X_6 by X_9: Student Current Employment by Student Sex

Variable X_{10} by X_6: Student Age by Student Current Employment

Variable X_7 by X_8: Student Related Work Experience by Student Supervisory Experience

Variable X_7 by X_{10}: Student Related Work Experience by Student Age

Variable X_{10} by X_8: Student Age by Student Supervisory Experience

2. Which of the above sources of variables, contribute significantly to the achievement of post secondary students based on a measure of their knowledge of recruitment, selection, and training?

Research Methodology

The study was quasi-experimental involving two levels of treatment: (1) the post secondary IDECC teaching approach and (2) the post secondary traditional teaching approach.

Sixteen classes were randomly selected from a population of 28 volunteer sites. Eight of the 16 classes were randomly assigned to one group while the remaining eight sites were assigned to a second group. Then each group was randomly assigned to either the IDECC teaching approach or to the traditional teaching approach.

In order to assure control of the study, a workshop was held for each of the groups, IDECC and traditional.

The instructional materials for both teaching approaches were based on the unit of "Recruitment, Selection and Training Personnel." The same objectives were used for both approaches.

The IDECC approach utilized selected post secondary IDECC competency-based materials as their unit of instruction. The traditional instructors developed lesson plans as their instructional material within the workshop setting. This method was utilized by all eight traditional instructors involved in the study.

In order to collect the data on the variables of interest, a questionnaire was developed and administered to both the students and instructors prior to the treatment.

At the onset of the study, students were administered a research study pretest and a verbal ability test. The research study pretest was designed and validated to assess the student's prior knowledge of recruitment, selection and training in order to determine the equivalency of their knowledge prior to the treatment. The ability test was utilized to determine if there was a significant difference in the ability of all the students involved in the study.

During the treatments, the students in the IDECC group received instruction by the IDECC systematic approach through 14 competency packages which provided instruction on the topic of recruitment, selection and training. The traditional students received their instruction through the traditional teaching approach as established by the traditional instructors within the workshop setting.

At the completion of the instruction, each group was administered a research study posttest to assess the students' knowledge of recruitment, selection and training.

Data was submitted by mail to the investigators as it was collected within the sites. Ability tests were hand scored and double checked at the project office by the investigators. The research study pretests and posttests were machine scored and spot checked for accuracy.

The data were analyzed by utilizing the Statistical Package for the Social Sciences for the description of the student and instructor variables. The Statistical Analysis System was used to analyze the sources of variance in relation to the research study's posttest scores.

Major Findings and Conclusions

The study was designed to determine if teaching approach, after controlling for school effect and selected student variables, contributes significantly to student achievement based on a measure of knowledge of recruitment, selection and training.

If yes, will there be a significant difference between the achievement of post secondary students who learn by the IDECC post secondary systematic teaching approach and post secondary students who learn by the traditional teaching approach?

In addition, this study was designed to investigate the secondary research questions:

1. What proportion of the variance of student achievement is accounted for by the sources of variance identified in Chapter 1?

2. Which of the identified sources of variance contribute significantly to the achievement of post secondary students based on a measure of their knowledge of recruitment, selection, and training?

Within the limitations stated in Chapter 1, the findings and conclusions are valid for the population of this study.

The following findings and conclusions correspond to the above research question.

Secondary Research Questions

Question - 1. What proportion of the variance of student achievement is accounted for by the sources of variance identified in Chapter 1?

When analysis of covariance by regression was utilized taking 40 sources of variance into consideration, 50.45% of the variance was accounted for in the research study posttest score.

Within the full model with 40 sources of variance presented, only one source of variance, the effect of schools, made a significant contribution.

Based on these findings, the investigators concluded that under the stated research study conditions, taking 40 variables into consideration, the effect of schools was the only source of variance that significantly contributed to the research study posttest score. Therefore, the effect of school on students' posttest scores seemed to be due to the use of intact classes used in this quasi-experimental study. This outcome was expected by the researchers and for this reason was built in the study design.

Question - 2. Which of the identified sources of variance contribute significantly to the achievement of post secondary students based on a measure of their knowledge of recruitment, selection, and training?

The investigators found that by restricting the sources of variance to 13, with only a 5.69% loss of the variance accounted for in the full model, the following four sources of variance made a significant contribution to the research study posttest score:

a. X_1 - Teaching Approach. F - 4.66; df = 1/181; p = .0322

b. X_2 - Ability. F = 28.39; df = 1/181; p = .0001

c. (X_1) - Schools. F = 4.39; df = 14/181; p = .0001

d. $(X_7)(X_1)$ - Related work experience in combination with teaching approach. F = 6.46; df = 1/181; p = .0119

a. The finding of a significant main effect, teaching approach, was not interpreted due to the significant interaction of teaching approach and related work experience.

Therefore, the significant contribution of teaching approach will be discussed in relationship to related work experience.

b. It was found that as the student ability scores increased, the research study posttest scores increased and made a significant contribution to research study posttest scores.

Based on this finding, the investigators concluded that regardless of the teaching approach, IDECC or traditional, as students' general mental ability increases, the research study posttest scores will have a tendency to increase.

Furthermore, the general mental ability of the post secondary students was an important consideration no matter which teaching approach was received by the students.

c. The schools effect made a significant contribution to the research study posttest score.

The investigators concluded that the effect of the intact classes used in the study caused schools to make a significant contribution to the research study posttest scores.

Therefore, it was concluded that, under the research study condition, the effect of schools made a significant contribution to the student's posstest score.

d. The significant contribution of related work experience in combination with teaching approach answered the primary research question.

Primary Research Question

The study was designed to determine if teaching approach, after controlling for school effect and selected student variables, contribute significantly to student achievement based on a measure of knowledge of recruitment, selection and training.

If yes, will there be a significant difference between the achievement of post secondary students who learn by the IDECC post secondary systematic teaching approach and post secondary students who learn by the traditional approach?

It was found that teaching approach when in combination with related work experience made a significant contribution to the student's research study posttest score. Specifically, there was a significant

difference between the achievement of post secondary students who learn by the IDECC post secondary systematic approach and post secondary students who learn by the traditional approach when the teaching approach was in combination with student related work experience.

The investigators found that students with a low number of years of related work experience who had received instruction on recruitment, selection, and training by the IDECC systematic teaching approach had a tendency to make lower scores on the research study posttest; however, as the work experience increased for the IDECC group achievement scores increased. An opposite effect occurred with students who received instruction by the traditional teaching approach. Traditional group students with a low number of years of related work experience achieved higher scores than did the IDECC students with similar work experience; however, achievement scores for traditional students decreased as their work experience increased.

The investigators concluded that students with under two and one-half years of related work experience achieve higher when learning by the traditional teaching approach and that students with over two and one-half years of related work experience have higher achievement when learning by the IDECC systematic approach.

The sample of this study had an average number of years of related work experience of 2.73. Therefore, the investigators generalizing to the population of this study, concluded that post secondary students achieve higher scores when learning by the IDECC teaching approach than do post secondary students when learning by the traditional teaching approach.

Recommendations for Further Research

Based on the findings of this study, the following are recommendations for further research:

1. A longevity study should be conducted which replicates the design of this study and utilizes a larger portion of the competency materials of the post secondary IDECC system.

2. A study should be conducted which examines the relationship between school effect and teaching approaches.

3. An investigation of instructor variables as they relate to the effectiveness of teaching approaches should be conducted.

4. A descriptive study should be conducted to identify the characteristics of post secondary students enrolled in distributive education programs.

5. A descriptive study should be conducted to identify the characteristics of the traditional teaching approaches utilized in post secondary distributive education programs.

BIBLIOGRAPHY

BIBLIOGRAPHY

Barr, Anthony J., Goodnight, James H., Sall, John Paul, Helwig, Jane T. Statistical Analysis System. Raleigh, North Carolina: Sparks Press, SAS Institute, Inc., 1976.

Borgatta, Edgar F. "Quick Word Test." Itasca, Illinois: F.E. Peacock Publishers, Inc., 1964.

Borgatta, Edgar F. "Quick Word Test Order Form." Itasca, Illinois: F.E. Publishers, Inc., 1978.

Borgatta, Edgar F. & Corsini, Raymond J. Quick Word Test Manual. Itasca, Illinois: F.E. Peacock Publishers, Inc., 1964.

Broadnax, Reginald, Emery, Ervin A., Shell, Vicki, & Turner, Betty H. "Development and Validation of Competency Based Instructional Systems for Adult, Post Secondary, Special Needs, and Entrepreneurship Via the IDECC system." Washington, D.C.: U.S. Office of Education, March, 1978.

Crawford, Lucy C. "A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education." Washington, D.C.: U.S. Office of Education, December, 1967.

"A Digest of Human Subject Program Guidelines." Columbus, Ohio: The Ohio State University, July 1, 1977.

Kennedy, John J. An Introduction to the Design and Analysis of Experiments in Education and Psychology. Washington, D.C.: University Press of America, 1977.

Kerlinger, Fred N. Foundations of Behavioral Research. New York: Rinehart and Winston, 1973.

Lucas, Stephen R., Miles, Benton R., & Weber, Larry L. The Evaluation of Learning Activity Packages Developed by the Interstate Distributive Education Curriculum Consortium. Greensboro: The University of North Carolina Press, 1973.

Nie, Norman H., Hull, C. Halai, Jenkins, Jean G., Steinbrenner, Carin, Bent, Dale H. Statistical Package for the Social Sciences. 2nd Edition, New York: McGraw Hill Book Company, 1970.

Publication Manual of the American Psychological Association, 2nd Edition, Washington, D.C.: American Psychological Association, 1974.

"Vocational and Technical Education Selected Statistical Tables, Fiscal Year 1975," Vocational Education Information No. II, U.S.O.E., 1976.

Williams, Terry M. "Identification of Performance Tasks for Distributive Education Teacher-Coordinators Who Utilize the IDECC System." Doctoral Dissertation, The Ohio State University, 1977.

APPENDIX A

Unit of Instruction Outline

EMPLOYEE RECRUITMENT, TRAINING, & EVALUATION

A. Employee Recruitment

1. Determining the need for employees
2. Employee qualifications

B. Employee Selection & Placement

1. Interviewing employees
2. Selecting employees
3. Selecting within the organization
4. Use of store policies in hiring, promoting, and dismissing employees

C. Job Orientation

1. Efficiency in job orientation
2. Orientation and its relation to future job performance

D. Training Employees

1. Methods of training
2. Selecting and using training methods

E. Evaluating Employees

1. Evaluation procedure
2. Analyzing employee performance
3. Constructive criticism

APPENDIX B

Reference Information for Competencies from the Post Secondary IDECC System

The fourteen post secondary competencies utilized for this experimental study can be found in Part II of the Final Report, U.S.O.E., Part C, Grant #G0076-05242, "B," "T," project #498AH60200. The Competency numbers for the Learning Activity Packages utilized in this study are:

1. 734
2. 612
3. 661
4. 692
5. 693
6. 765
7. 611
8. 691
9. 606
10. 607
11. 690
12. 610
13. 664
14. 729*

*Competencies were presented by the IDECC group of instructors in this order of instruction to the experimental treatment group.

APPENDIX C

Objectives and Resources Utilized in the Experimental Study

OBJECTIVE: Given a specific situation, demonstrate the ability to determine when additional employees are needed.

OBJECTIVE: Respond to four questions based on a case study dealing with qualifications for recruiting new employees.

OBJECTIVE: You will demonstrate your knowledge of interview techniques by interviewing a potential employee, obtaining and offering all necessary data concerning the business, its operations and policies.

OBJECTIVE: Given a chart with three types of jobs listed, you will be able to list five physical, five mental, and five emotional requirements needed to perform each of the three jobs.

OBJECTIVE: Select the individual best suited for a position basing your decision on a job specification sheet and information concerning applicants for the position.

OBJECTIVE: Indicate a knowledge and understanding of present personnel policies for filling job vacancies, through written question/activities.

OBJECTIVE: Given a series of personnel problems you will demonstrate a knowledge and understanding of the relationship of company personnel policies to employment decisions.

OBJECTIVE: You will be able to identify a minimum of ten points/steps that will assure efficiency in job orientation training.

OBJECTIVE: You will describe the relationship between proper employee orientation and future job performance and discuss two approaches a supervisor may use to orient a new employee.

OBJECTIVE: Describe ten methods of training employees.

OBJECTIVE: Identify the most appropriate method of training an individual for expected job performance.

OBJECTIVE: To demonstrate knowledge and understanding of a store's procedure for evaluating employees, you will respond to four questions concerning evaluation procedures with 80% accuracy.

OBJECTIVE: You will be able to identify, in writing, three specific suggestions one should keep in mind when using records to analyze and supervise the work of employees at different levels, with 100% accuracy.

OBJECTIVE: You will be able to name a minimum of three guides/steps to be used when correcting an employee.

Post Secondary

Resources

Employee Recruitment, Training, & Evaluation

Retailing Management: A Planning Approach, Larry D. Redinbaugh, McGraw-Hill, 1976. Chapter 17.

Personnel Management, 5th Ed., Chruden/Shireman, South-Western, 1976. Chapters 5, 6, 8 (pp. 173-193), 10.

Principles of Personnel Management, 4th Ed., Flippo, Mc-Graw-Hill, 1976. Chapters 5 (pp. 84-86), 6, 7, 8, 10, 12, 13, 20 (pp. 437-443).

Supervision--Concepts and Practices of Management, 2nd Ed., Haimann/Hilgert, South-Western, 1977. Chapters 12, 13, 14, 17.

APPENDIX D

Letter and Reference Form to Distributive Education State Supervisors

THE OHIO STATE UNIVERSITY

November 7, 1977

IDECC Project Office
1166 Chesapeake Ave.
Columbus, Ohio 43212

The Interstate Distributive Education Curriculum Consortium (IDECC) will be conducting an experimental study in the spring of '78. The study will measure the achievement of students when using the IDECC systematic approach to learning in comparison to the traditional approach.

Sixteen post secondary programs will be selected throughout the nation to take part in the study. Eight will utilize the IDECC approach and eight will use the traditional approach in instructing the students in learning the same curriculum content. The length of the actual study will range from six to eight weeks.

Those instructors which are involved in the study will attend a 1 to 5 day workshop depending on whether the instructor is utilizing the IDECC or traditional approach. A stipend and expenses will be paid for each day in the workshop.

We are looking for instructors who are interested in becoming involved in the experiment. Familiarity with the IDECC system is not a pre-requisite for participating in this study.

We would like to have your recommendation of post secondary instructors which would be potential sites to be involved in this study.

Please return your recommendations on the enclosed form by November 25th.

Thank you for your attention to this matter.

Sincerely,

Betty H. Turner
IDECC Project Coordinator

115

Note: If the post secondary programs are not under your supervision in your state, please forward this request through the proper channels.

Dr. Larry Casterline / Executive Director
Interstate Distributive Education Curriculum Consortium (IDECC) / 1885 Neil Avenue (119) Townshend Hall / Columbus, Ohio 43210 / Phone (614) 422-4202

Please return by November 25, 1977

Post-Secondary

INSTRUCTOR'S NAME _____

SCHOOL _____

SCHOOL ADDRESS _____

CITY _____ STATE _____ ZIP _____

INSTRUCTOR'S NAME _____

SCHOOL _____

SCHOOL ADDRESS _____

CITY _____ STATE _____ ZIP _____

INSTRUCTOR'S NAME _____

SCHOOL _____

SCHOOL ADDRESS _____

CITY _____ STATE _____ ZIP _____

INSTRUCTOR'S NAME _____

SCHOOL _____

SCHOOL ADDRESS _____

CITY _____ STATE _____ ZIP _____

INSTRUCTOR'S NAME _____

SCHOOL _____

SCHOOL ADDRESS _____

CITY _____ STATE _____ ZIP _____

INSTRUCTOR'S NAME _____

SCHOOL _____

SCHOOL ADDRESS _____

CITY _____ STATE _____ ZIP _____

RECOMMENDED BY _____

APPENDIX E

Letter and Response Form to Post Secondary Instructors

THE OHIO STATE UNIVERSITY

November 7, 1977

IDECC Project Office
1166 Chesapeake Ave.
Columbus, Ohio 43212

The Interstate Distributive Education Curriculum Consortium (IDECC) will be conducting an experimental study in the spring of '78. The study will measure the achievement of students when using the IDECC systematic approach to learning in comparison to the traditional approach.

Sixteen post secondary programs will be selected throughout the nation to take part in the study. Eight will utilize the IDECC approach and eight will use the traditional approach in instructing the students in learning the same curriculum content. The length of the actual study will range from six to eight weeks.

Those instructors which are involved in the study will attend a 1 to 5 day workshop depending on whether the instructor is utilizing the IDECC or traditional approach. A stipend and expenses will be paid for each day in the workshop.

We are looking for instructors who are interested in becoming involved in the experiment. Familiarity with the IDECC system is not a pre-requisite for participating in this study.

We would like to have your recommendation of post secondary instructors which would be potential sites to be involved in this study.

Please return your recommendations on the enclosed form by November 25th.

Thank you for your attention to this matter.

Sincerely,

Betty H. Turner
IDECC Project Coordinator

Note: If the post secondary programs are not under your supervision in your state, please forward this request through the proper channels.

Please return by November 25, 1977

Post-Secondary

INSTRUCTOR'S NAME _____

SCHOOL _____

SCHOOL ADDRESS _____

CITY _____ STATE _____ ZIP _____

INSTRUCTOR'S NAME _____

SCHOOL _____

SCHOOL ADDRESS _____

CITY _____ STATE _____ ZIP _____

INSTRUCTOR'S NAME _____

SCHOOL _____

SCHOOL ADDRESS _____

CITY _____ STATE _____ ZIP _____

INSTRUCTOR'S NAME _____

SCHOOL _____

SCHOOL ADDRESS _____

CITY _____ STATE _____ ZIP _____

INSTRUCTOR'S NAME _____

SCHOOL _____

SCHOOL ADDRESS _____

CITY _____ STATE _____ ZIP _____

INSTRUCTOR'S NAME _____

SCHOOL _____

SCHOOL ADDRESS _____

CITY _____ STATE _____ ZIP _____

RECOMMENDED BY _____

APPENDIX F

Letter and Response Form to Instructors Who Wish to Participate in the Experimental Study

As of this date, I have received responses from 54 instructors who are interested in participating in the study on comparing the learning outcomes of the IDECC systematic approach with the traditional approach.

Within these 54 instructors, 56 courses are taught in the spring semester or quarter. Many courses have similar titles and appear to have similar content.

Based on the course outlines and the courses which appear to be taught most often I have developed a short unit which has the potential of slotting into one of several courses.

Please review the enclosed unit outline and complete and return the attached form by January 16, 1978.

We will continue to correspond until we have decided upon a unit which can be incorporated into courses of 16 study sites.

Again, thank you for your interest in participating in this study. Hopefully, we will be able to determine the sites based on your responses.

Sincerely,

Betty H. Turner
IDECC Project Coordinator

Encl: (2)

BHT/cal

EMPLOYEE RECRUITMENT, TRAINING, & EVALUATION

A. Employee Recruitment

1. Determining the need for employees
2. Employee qualifications

B. Employee Selection & Placement

1. Interviewing employees
2. Selecting employees
3. Selecting within the organization
4. Use of store policies in hiring, promoting, and dismissing employees

C. Job Orientation

1. Efficiency in job orientation
2. Orientation and its relation to future job performance

D. Training Employees

1. Methods of training
2. Selecting and using training methods

E. Evaluating Employees

1. Evaluation procedure
2. Analyzing employee performance
3. Constructive criticism

POST-SECONDARY STUDY SITES

Instructor's Name _____

School Address _____

_____

_____

_____

Phone Number _____

Office Hours (when you can be reached) _____

_____

I can use the enclosed unit in a course I am teaching in the spring term.

Yes _____ No _____

If yes, what course? _____

If not, why? _____

If the unit can be used, can it be taught during the month of April?

Yes _____ No _____, please explain if no.

_____

_____

Are you on the quarter or semester system? _____

Dates of Spring term _____

Please return to:

Ms. Betty H. Turner
IDECC Project Coordinator
IDECC Project Office
1166 Chesapeake Ave.
Columbus, Ohio 43212

123

PLEASE RETURN BY JANUARY 16, 1978

APPENDIX G

Master List of Multiple Choice Test Questions

Select the best answer:

1. An employee should be evaluated for which of the following reasons?

   A. An employee has a right to know (1) how well s/he is doing and (2) what s/he can do to better his/her work performance.
   B. To let him/her know where their weaknesses are and why they may not receive a pay raise.
   C. Neither of the above are valid reasons for evaluating an employee.

2. Which of the following best reflects when formal employee evaluation should occur?

   A. Regularly
   B. Continuously
   C. Occasionally

3. Who should appraise the employee?

   A. The manager
   B. The employee's immediate supervisor
   C. A co-worker

4. Which of the following is a major difficulty in filling out evaluation forms?

   A. Finding the time to complete the form
   B. Understanding the format of the evaluation form
   C. Interpreting what is meant by such terms as excellent, good, average, or poor

Select the best answer:

5. Which of the following factors is most frequently included in performance rating (evaluation) forms?

   A. Punctuality, drive, attendance, quantity
   B. Cooperation, quality, stability, attitude
   C. Both A and B

6. Employee evaluation can serve as a basis for:

   A. salary adjustments, transfers, promotion, and termination.
   B. salary adjustments, promotion, vacations, terminations.
   C. transfers, promotions, leave, termination.

7. Appraisal of employees should occur at least:

   A. once every five years.
   B. once a year.
   C. once a month.

8. A formal evaluation system helps the supervisor in which of the following ways?

   A. Reduces the chance of personal bias distorting the rating.
   B. Requires less time be spent on employee evaluation.
   C. Both A and B

9. The evaluation of an employee should be made by:

   A. their co-workers.
   B. the corporation president.
   C. the immediate supervisor.

Select the best answer:

10. Which of the following statements is most valid?

    A. Large companies usually use the same number of training methods.
    B. Certain methods of instruction are best for most training programs.
    C. Some methods of instruction may be better for a particular training program than others.

11. The content (subject matter) to be included in the training program should be based upon which of the following?

    A. Cost of the training method
    B. Tasks performed on the job
    C. Abilities of the individuals to be trained

12. Evaluation of a training program should be based primarily upon which of the following?

    A. The extent to which the original goal or objective was achieved
    B. Employee attitudes toward their training
    C. Methods training

13. Which of the following is NOT a consideration when choosing a training method?

    A. Type or level of the job
    B. Time and expense involved
    C. Objectives of the business

Select the best answer:

14. It is important that which of the following occur before employee training begins?

A. Conducting a class entitled "How to Study"
B. Issuing name tags
C. Training the instructor

15. Disciplinary action should be taken:

A. in private.
B. in weekly meeting.
C. in public.

16. In what setting should evaluation reviews take place?

A. During department or store meetings
B. In small groups
C. In private

17. When evaluating an employee, the supervisor should do which of the following?

A. Emphasize strengths which could help the employee grow
B. Emphasize weaknesses only
C. Ask that employee traits be changed

18. The most drastic form of disciplinary action is:

A. reprimand.
B. demotion.
C. discharge.

Select the best answer:

19. Four basic rules to apply in discipline are:

A. immediacy, appealing, warning, and impersonality.
B. immediacy, advance warning, consistency, and impersonality.
C. immediacy, impersonality, consistency, and harassment.

20. Which of the following is a primary purpose of employee evaluation?

A. Identify employees that should be released.
B. Motivate employees.
C. Relax the employee.

21. Discipline action should always be applied by:

A. top management.
B. immediate supervisor.
C. union representative.

22. The employee should be evaluated based upon which of the following?

A. Standards established for the individual when hired
B. Standards established for all employees doing the same job
C. Both A and B

23. The most commonly used method of training employees is:

A. classroom training.
B. on the job training.
C. conference or discussion.

Select the best answer:

24. Which of the following training methods is used to provide training in the practical and theoretical aspects of the work in a skill trade?

A. Apprentice
B. On-the-job
C. Simulation

25. Which of the following training approaches provides for handling the maximum number of trainees with a minimum number of instructors?

A. Individualized instruction
B. Classroom training
C. Conference

26. Which of the following training methods is used when the actual equipment is not available but similar devices are used?

A. Simulation
B. On-the-job
C. Demonstration

27. Which of the following training methods usually requires a high degree of employee participation?

A. Demonstration
B. Discussion
C. Simulation

28. A training program which combines practical on-the-job experience with formal classes are called:

A. apprenticeship training.
B. cooperative training.
C. programmed instruction.

29. Which of the following training methods is developed from actual, realistic experiences which the students interpret and analyze?

A. Simulation
B. Discussion
C. Case study

30. The most frequently used methods of training are:

A. simulators and other training devices, computer assisted instruction, job instruction training, conference and lecture.
B. job instruction training, conference or discussion, apprenticeship training, job rotation, coaching, and lecture.
C. job instruction training, computer assisted instruction, conference or discussion, apprenticeship training, coaching, and lecture.

31. The use of a training method should be determined by:

A. objectives of the particular training course.
B. abilities of the trainer and trainees.
C. both of the above.

32. Which of the following is a disadvantage associated with programmed instruction?

A. Each trainee learns at his or her own pace.
B. More instructors are needed.
C. Cost in preparing programs is high.

33. Proper job orientation has a relationship to:

A. amount of salary required.
B. the overtime put in by the new employee.
C. future job performance.

Select the best answer:

34. A formal orientation program should provide new employees with all but one of the following items. Which item should it NOT include?

A. Information concerning safety rules
B. Elaboration over policies and procedures of the business
C. Description of the company

35. Which person has the most important role in the orientation program?

A. Co-worker
B. Personnel director
C. Supervisor

36. Time spent to reduce anxiety at the beginning of the orientation period has shown that:

A. it makes no difference in the productivity and absenteeism of new employees.
B. the results are greater productivity and reduced personnel costs.
C. neither of the above statements are accurate.

37. The supervisor should not orient the new worker in the following way:

A. The supervisor may assign the new employee to a current employee.
B. The supervisor may choose to conduct the entire orientation.
C. The new employee may be allowed to look around and learn on their own.

Select the best answer:

38. Regardless of who actually does the orientation of new employees, the responsibility for the task lies with the:

A. worker.
B. supervisor.
C. peers.

39. When should a new employee be oriented to the job?

A. First day on the job
B. After the employee has been able to "settle down" (second day).
C. Second week of work

40. A primary purpose of the orientation program is to do which of the following?

A. Train the employee.
B. Relieve anxieties of the employee.
C. Evaluate the employee.

41. Orientation requires:

A. a plan.
B. an organization chart.
C. a lot of activities.

42. It has been found that in regard to anxieties and orientation that:

A. anxiety of new employees interferes with orientation and training process.
B. orientation and training makes new employees have anxietites.
C. it is better to orient and train new employees after they have been on the job six weeks.

Select the best answer:

43. A good training program is based upon which of the following?

A. A variety of methods
B. One specific method
C. Classroom training

44. Initiation practices with new employees by peers has a tendency to:

A. increase anxiety in new employees.
B. give an image that the organization will be pleasurable to work in.
C. cause the new employee to resent their peers.

45. The use of a checklist in orienting new employees insures:

A. that the new employee has something to follow for the first few days.
B. not overlooking items in orientation that are important to the new employee.
C. none of the above are accurate.

46. Job orientation programs are primarily concerned with which of the following?

A. In-depth instruction on the organization, its purpose and procedures
B. A general overview of the company and policies and procedures as they concern the new employee
C. Both A and B

Select the best answer:

47. A policy is:

A. a manmade rule or predetermined course of action that is established to identify the performance of work toward organization objectives.
B. a manmade rule or predetermined course of action that is established to guide the performance of work toward the organization objectives.
C. An established criterion or model against which actual results can be compared.

48. In establishing policies, the following is often a virtue which enables equitable treatment on a company-wide basis.

A. Consistency
B. Stability
C. Definiteness

49. Personnel policies should possess characteristics such as:

A. flexibility, stability, consistency.
B. definiteness, understandability, comprehensiveness.
C. all of the above.

50. Before establishing policies a manager should:

A. draw up a list of items that should be included.
B. promote wide-spread participation of all employees in the formulation of the policies.
C. both of the above.

Select the best answer:

51. An organization is only as good as its:

A. owner, stockholders, and director.
B. owner, employees, and customers or clients.
C. owner, manager, and employees.

52. Logical lines of advancement within an organization can be charted by:

A. designing an organization chart.
B. analysis of job responsibilities.
C. both of the above.

53. Employer's staffing policies and procedures should insure that:

A. qualified personnel are attracted to apply for employment.
B. all applicants receive fair and considerate treatment.
C. both A and B.

54. The two formal basis upon which a decision can be made concerning promotions are:

A. salary and potential.
B. merit and senority.
C. none of the above.

55. Transfers within an organization usually refers to which of the following conditions?

A. Change in job that involves little or no change in status, responsibility, and pay
B. Both A and C
C. An increase in responsibility and status without an increase in pay

Select the best answer:

56. The management of retail personnel includes:

A. recruitment, selection, training, evaluation, and compensation.
B. planning, organizing, directing, and controlling.
C. recruitment, selection, facilitating, training, evaluation, and compensation.

57. Application forms completed by applicants provide which of the following types of information?

A. Personal work experience and professional experience.
B. Personal work experience and educational experience
C. Professional experiences, personal, and psychological

58. The job specification statement usually includes the:

A. required knowledge, skills, and attributes needed for a job category.
B. the description of the applicant's background and personality.
C. none of the above.

59. The extent to which selectivity can be achieved will depend upon which of the following?

A. The qualifications of the applicants.
B. The description of the job for which the applicant is applying
C. The number of qualified applicants available for consideration

Select the best answer:

60. In selecting an employee for a job, the following should be matched:

A. The resume and the application of the applicant
B. Job specifications and applicants' qualifications
C. The results of the personality tests and the job description

61. In hiring personnel, there are three types of abilities with which a personnel manager would need to be concerned. They are:

A. psychological, physiological, and audio.
B. mental, emotional, and psychological.
C. physical, mental, and emotional.

62. Alertness, honesty, interest, and organization are examples of what kind of ability?

A. Physical
B. Mental
C. Emotional

63. Methods by which emotional stability can be measured are:

A. testing and physical examination.
B. intelligent tests and physical examinations.
C. personality testing and interviews.

64. Emotional stability is important on the job for the following reason:

A. Enables personnel to get along well with other on the job
B. Enables employers to pay employees a higher salary for their maturity level
C. Enables employees to function in jobs which call for physical strength

Select the best answer:

65. In general, a person's physical abilities and condition should be:

A. matched to the job in which s/he is performing.
B. excellent and in top health condition.
C. free of any handicap conditions.

66. Factors which should be considered in determining needed qualifications of personnel are:

A. salary paid, job description, number of days needed for employment.
B. production requirements, job description, and expected technical and managerial needs.
C. fluctuations of production, working environment, past work history of the employee.

67. A very helpful tool in recruiting personnel to assure matching qualifications to the job is:

A. job description.
B. schedule of job needs.
C. production schedule.

68. If employers depend entirely on recruiting from internal sources, conditions may result in:

A. sheltering employees from dismissal for lack of appropriate behavior.
B. sheltering employees from the competition of "outsiders" who may be more qualified.
C. decrease in morale and incentive to put forth the effort for promotions.

Select the best answer:

69. When recruiting qualified personnel, the individual hiring should:

A. identify the qualifications expected when the employee begins their employment.
B. identify what s/he expects after the employee has had an opportunity to adjust to the working conditions.
C. identify the exact qualifications expected of the employee in the process of recruiting.

70. The number of employees needed will depend on such things such as:

A. the degree of specialization of the business, the size of the business, hours of operation, the nature of operation.
B. the size of the business, the size of the competitor's business, the services offered by the business.
C. the degree of business specialization, the hours of operation, the number of breaks granted personnel, the number of hours a person works a day.

71. The staffing of an organization involves the process of analyzing:

A. the present personnel and obtaining future personnel.
B. past and present needs and obtaining personnel to meet the needs.
C. present and future needs and obtaining personnel to meet the needs.

72. Before actual recruitment takes place, the employer must determine:

A. the number of personnel already on payroll and the funds available.
B. the nature of the work to be accomplished and the employee needs.
C. the employee needs and the applications available on file.

Select the best answer:

73. Anticipation of changes in personnel needs can be detected through:

A. the demand for a company's products or services.
B. the informal organization and management influence.
C. the customer or clientele's wants and needs.

74. Questions by an interviewer should be asked:

A. in a manner that encourages the interviewee to talk.
B. in a manner that encourages the interviewee to discuss his/her personal life.
C. in a manner that encourages the interviewee to talk about problems on the previous job.

75. At the close of the interview the interviewers may do one of the following three choices:

A. Ask for a new application, hire the applicant, defer the decision.
B. Defer the decision, call the applicant later, ask for a new application.
C. Hire the applicant, defer the decision, or reject the applicant.

76. An employment interview provides the interviewer with an opportunity to ask questions which:

A. provide an opportunity for the interviewer to learn more about the interviewee personally.
B. will provide an opportunity for the interviewer to practice his/her techniques of interviewing.
C. will supplement the application form and will provide information to the prospective employee.

Select the best answer:

77. The most widely used technique of final selection of new employees is the use of:

A. resumes and phone conversations.
B. application and resumes.
C. interviews.

APPENDIX H

Experimental Study Pretest

PRE-TEST

Employee Recruitment, Training and Evaluation

Post Secondary

Select the BEST answer:

1. What would be the best method of determining logical lines of advancement within an organization?

   A. Designing an organization chart
   B. Analysis of job responsibilities
   C. Discussions with supervisors

2. The job specification statement usually includes the:

   A. required knowledge, skills, and attributes needed for a job category.
   B. the description of the applicants' background and personality.
   C. Both A and B.

3. Which of the following conditions may result if employers depend entirely on recruiting from internal sources?

   A. Sheltering employees from dismissal for lack of appropriate behavior.
   B. Sheltering employees from the competition of"outsiders" who may be more qualified.
   C. Decrease in morale and lack of incentive needed for promotions

4. Which of the following represents the best definition for a policy?

   A. A rule is established to set the level of performance required toward organization objectives.
   B. A man made rule or predetermined course of action that is established to guide the performance of work toward the organization objectives.
   C. An established criterion or model against which actual results can be compared.

5. The most frequently used methods of training are:

   A. simulators and other training devices, computer assisted instruction.
   B. job instruction training, conference or discussion, apprenticeship training.
   C. computer assisted instruction, apprenticeship training, coaching and lecture.

Select the BEST answer:

6. Which of the following training approaches provides for handling the maximum number of trainees with a minimum number of instructors?

   A. Individualized instruction
   B. Classroom instruction
   C. Conference

7. Which of the following is a suggestion to keep in mind when using records to analyze and supervise employees?

   A. Records need not be confidential.
   B. Records should be used as the sole basis for a final decision on personnel.
   C. Records should be checked for completeness, accuracy, and updated periodically.

8. Evaluation of a training program should be based primarily upon which of the following?

   A. The degree to which the original goal or objective was achieved
   B. Employee attitudes toward their training program
   C. The type of training method used

9. Which of the following determines the number of employees needed for a retail store?

   A. The degree of business specialization, the size of the business, hours of operation, the nature of operation
   B. The size of the business, the size of the competitor's business, the services offered by the business
   C. The degree of business specialization, the hours of operation, the number of hours a person works a day

10. Which of the following represents the primary purpose of an employment interview?

    A. It provides an opportunity for the interviewer to learn more about the interviewee's personal life.
    B. It provides an opportunity for the interviewer to practice their techniques of interviewing.
    C. It will provide an opportunity to add to the information previously obtained in the application blank and tests.

Select the BEST answer:

11. To assure matching qualifications to the job, a very helpful tool in recruiting personnel is:

    A. job description.
    B. schedule of job needs.
    C. production schedule.

12. The extent to which selectivity can be achieved will depend upon which of the following?

    A. The qualifications of the applicants
    B. The description of the job for which the applicant is applying
    C. The number of qualified applicants available for consideration

13. Proper job orientation has a relationship to:

    A. amount of salary required.
    B. the overtime put in by the new employee.
    C. future job performance.

14. Emotional stability is important on the job for the following reason:

    A. Enables personnel to get along well with others on the job
    B. Enables employers to pay employees a higher salary for their maturity level
    C. Enables employees to function in jobs which call for physical strength

15. Which of the following statements is most valid?

    A. Large companies usually use the same number of training methods.
    B. Certain methods of instruction are best for most training programs.
    C. Some methods of instruction may be better for a particular training program than others.

16. Which of the following is the preferred way for a supervisor to orient a new employee?

    A. The supervisor leaves the orientation up to the co-workers.
    B. The supervisor conducts the orientation.
    C. The new employee looks around and learns from observation.

17. When evaluating an employee, the supervisor should do which of the following?

    A. Emphasize strengths which could help the employee grow.
    B. Emphasize weaknesses only.
    C. Ask that employee traits be changed.

Select the BEST answer:

18. Records may be used to analyze and supervise the work of employees in which of the following ways?

    A. Records should not be used for evaluating work - supervisors should use observations and the evaluations of co-workers.
    B. For comparison purposes to see if an individual has improved their work over a period of time.
    C. As a source of information to co-workers to compare their work to others.

19. In general, disciplinary action should be taken:

    A. in private.
    B. in weekly meeting.
    C. in public.

20. In establishing policies, the following is often a virtue which enables equitable treatment on a company-wide basis.

    A. Consistency
    B. Stability
    C. Definiteness

21. What is the relation between anxieties and orientation of most new employees?

    A. Anxiety of new employees interferes with the orientation.
    B. Anxiety of new employees has no effect on the orientation process.
    C. Anxiety of new employees is reduced by the orientation process.

22. A good orientation program is based upon which of the following?

    A. A variety of methods
    B. One specific method
    C. Classroom training

23. Which of the following is an important objective of employee evaluation?

    A. Identify employees that should be released.
    B. Motivate employees.
    C. Relax the employee.

24. Regardless of who does the orientation of new employees, who actually has the responsibility for the task:

    A. worker.
    B. supervisor.
    C. peers.

Select the BEST answer:

25. Job orientation programs are primarily concerned with which of the following?

    A. In-depth introduction to the organization, its purpose and procedures
    B. An overview of the company and policies and procedures as they concern the new employee
    C. The projected earnings of the company

26. Which of the following methods provide the best assignment of emotional stability?

    A. Interest tests and physical examination
    B. Intelligent tests and physical examinations
    C. Personality tests and interviews

27. Which of the following lists of functions pertain to the management retail personnel?

    A. Recruitment, selection, training, evaluation,and compensation
    B. Planning, organizing, directing, and controlling
    C. Recruitment, selection, facilitating, training, evaluation, and compensation

28. The content (subject matter) to be included in the training program should be based primarily upon which of the following?

    A. Cost of the training method
    B. Tasks performed on the job
    C. Abilities of the individuals to be trained

29. In general, a person's physical abilities and condition should be:

    A. matched to the job in which s/he is performing.
    B. excellent and in top health condition.
    C. free of any handicap conditions.

30. Transfers within an organization usually refers to which of the following conditions?

    A. Change in job that involves little or no change in status, responsibility and pay
    B. An increase in responsibility and pay
    C. An increase in responsibility and status without an increase in pay

Select the BEST answer:

31. Before establishing policies a manager should:

A. draw up a list of items that should be included.
B. promote wide-spread participation of all employees.
C. both of the above.

32. What factors should be considered in determining needed qualifications of personnel?

A. Salary paid, job description, number of days needed for employment
B. Production requirements, job description, and expected technical and managerial needs
C. Fluctuations of production, working environment, past work history of the employee

33. The staffing of an organization involves the process of analyzing:

A. the present personnel needs and obtaining future personnel.
B. past and present needs and obtaining personnel to meet the needs.
C. present and future needs and obtaining personnel to meet the needs.

34. Employee evaluation usually does NOT serve as a basis for which of the following?

A. Salary adjustments, transfers
B. Promotion, terminations
C. Leave, vacations

35. Anticipation of changes in personnel needs can be detected through:

A. the demand for a company products or services.
B. the informal organization and management influence.
C. the stockholders' voting trends.

36. A formal evaluation system helps the supervisor in which of the following ways?

A. Reduces the chance of personal bias distorting the rating
B. Reduces the time required to spend on employee evaluation
C. Both A and B

37. What is the recommended time interval for appraisal of employees?

A. Once every two years
B. Once a year
C. Once a month

Select the BEST answer:

38. Which of the following training methods usually requires a high degree of employee participation?

    A. Demonstration
    B. Discussion
    C. Lecture

39. Application forms completed by applicants provide which of the following types of information?

    A. Personal work experience and professional experience
    B. Work experience, educational experience, and personal data
    C. Professional experiences, personal, and psychological data

40. What technique is most widely used in the final selection of new employees?

    A. Resumes and phone conversations
    B. Application and resumes
    C. Personal interviews

APPENDIX I

Experimental Study Posttest

ADULT STUDY

POST-TEST

Select the best answer:

1. The most commonly used method of training employees is:

   A. classroom training.
   B. on the job training.
   C. conference or discussion.

2. Evaluation of a training program should be based primarily upon which of the following?

   A. The type of training method used
   B. The degree to which the original goal or objective was achieved
   C. Employee attitudes toward their training program

3. What should an employer expect when a disadvantaged or slow employee has been hired?

   A. The employee will resist training efforts.
   B. The employee will be low in productivity.
   C. The employee will eventually reach the job performance. standards.

4. What is the recommended time interval for appraisal of employees?

   A. once a year.
   B. once a month.
   C. once every two years.

5. Which of the following statements is valid in terms of communicating with and motivating employees?

   A. The supervisor should want to communicate with the employees.
   B. The supervisor must be articulate and have a good command of the language.
   C. The supervisor must follow only the formal communication channels when motivating employees.

Select the best answer:

6. In order to motivate employees, which of the following approaches should be taken by the supervisor? 136

   A. Rarely praise the employee so as to prevent the employee from feeling too confident.
   B. Praise the employee concerning the supervisor's general impression of the employee.
   C. Offer praise when it is sincere.

7. When should orientation to the job begin for a new employee?

   A. First day on the job
   B. After the employee has been able to "settle down" (second day)
   C. Second week of work

8. The use of a checklist in orienting new employees insures:

   A. that the company is well managed.
   B. that the new employee has something to follow for the first few days.
   C. that important items are not overlooked by the supervisor in the orientation.

9. When evaluating an employee, the supervisor should do which of the following?

   A. Emphasize strengths which could help the employee grow
   B. Emphasize weaknesses only
   C. Ask that employee traits be changed

10. Which of the following personnel has the most important role in the orientation program?

    A. Co-worker
    B. Personnel director
    C. Supervisor

11. Records may be used to analyze and supervise the work of employees in which of the following ways?

    A. As a source of information to co-workers to compare their work to others.
    B. Records should not be used for evaluating work - supervisors should use observations and the evaluation of co-workers.
    C. For comparison purposes to see if an individual has improved his/her work over a period of time.

Select the best answer:

12. Which of the following is a common difficulty in filling out evaluation forms?

    A. Interpreting what is meant by such terms as excellent, good, average, or poor.
    B. Understanding the format of the evaluation form.
    C. Finding the time to complete the form.

13. In general, disciplinary action should be taken:

    A. in private.
    B. in weekly meeting.
    C. in public.

14. Job orientation programs are primarily concerned with which of the following?

    A. In-depth introduction to the organization, its purpose and procedures
    B. An overview of the company and policies and procedures as they concern the new employee
    C. The projected earnings of the company

15. The content (subject matter) to be included in the training program should be based primarily upon which of the following?

    A. Tasks performed on the job
    B. Abilities of the individuals to be trained
    C. Cost of the training method

16. Which of the following is a disadvantage associated with programmed instruction?

    A. Each trainee learns at his/her own pace.
    B. More instructors are needed.
    C. Cost in preparing programs is high.

17. Which of the following seems to help in motivating employees?

    A. Do not tell employees their faults so that they will improve on their own.
    B. Make the employees feel as if they belong in order to get them to want to produce.
    C. Alienate the employees so that they will not spend a lot of time talking to other employees and not getting their work done.

Select the best answer:

18. A training program which combines practical on-the-job experience with formal classes is called: 138

A. competency training.
B. cooperative training.
C. programmed instruction.

19. Which of the following is a consideration when choosing a training method?

A. Objectives of the business
B. Personality traits of the trainer
C. Type or level of the job

20. According to a survey in 1946, which of the following job factors did employees want most?

A. High wages
B. Full appreciation of work done
C. Good working conditions

21. The employee should be evaluated based upon which of the following?

A. Standards established for the individual when hired.
B. Standards established for all employees doing the same job.
C. Standards established for all departments in the business.

22. A sound orientation program requires which of the following?

A. a plan.
B. an organization chart.
C. a lot of activities.

23. Which of the following provides for effective morale?

A. Emphasis on conflicts to prevent employees from becoming too complacent.
B. Emphasis on employees working together as a team.
C. Emphasis on competition among individuals.

24. Which of the following training methods is based upon actual, realistic experiences which the students interpret and analyze?

A. Discussion
B. Case study
C. Simulation

Select the best answer:

25. Proper job orientation has a relationship to:

A. amount of salary required. 139
B. the overtime put in by the new employee.
C. future job performance.

26. Who should evaluate the employee's job performance in a large company?

A. The manager
B. The employee's immediate supervisor
C. A co-worker

27. Which of the following reflects the types of recognition that should be offered to the employee?

A. Recognition over specifics
B. General recognition
C. Lavish recognition

28. Which of the following best reflects when formal employee evaluation should occur?

A. on a regular basis
B. on a continuous basis
C. on an occasional basis

29. Which of the following statements is most valid?

A. Large companies usually use the same number of training methods as small businesses.
B. Certain methods of instruction are best for most training programs.
C. Some methods of instruction may be better for a particular training program than others.

30. Research has found which of the following to be valid?

A. Supervisors generally do not know what employees want most from their jobs.
B. Supervisors generally are not concerned with what employees want most from their jobs.
C. Supervisors generally know what employees want most from their jobs.

Select the best answer:

31. Which of the following is a suggestion to keep in mind when using records to analyze and supervise employees? 140

A. Records should be checked for completeness, accuracy and updated periodically.
B. Records need not be confidential.
C. Records should be used as the sole basis for a final decision on personnel.

32. Which of the following is a word that is the closest in meaning to "motivation?"

A. Incentive
B. Communication
C. Morale

33. Which of the following is recommended to develop pride and self-esteem in the employee?

A. Give the employee freedom to participate in decision-making situations.
B. Explain thoroughly the responsibilities of and expectations from the employee.
C. Formally evaluate the employee frequently.

34. What is the most drastic form of disciplinary action?

A. demotion.
B. discharge
C. reprimand.

APPENDIX J

Instructors Questionnaire

POST SECONDARY
INSTRUCTOR QUESTIONNARIE

Name _____

Social Security # _____

Check one: Full time instructor _____ Part time instructor _____

Age Range: (circle)

20 - 25	46 - 50
26 - 30	51 - 55
31 - 35	56 - 60
36 - 40	61 - 65
41 - 45	65 or over

How long have you been teaching? _____

How long have you been teaching in the marketing and distribution field? (Indicate years for each level)

_____ Post Secondary

_____ High School

_____ Other, specify _____

_____

_____

Describe highest level of education: _____

_____

_____

Please describe your work experience (non-teaching) related to the field of marketing and distribution: _____

_____

_____

_____

Give total years of experience of non-teaching experience described above _____

APPENDIX K

Student Questionnaire

Student Code # _____

POST SECONDARY
STUDENT QUESTIONNAIRE

Please check education completed:

_____ High school or equivalent

_____ Vocational/technical school
Area of study _____

_____ College
Circle # of years completed:

1 2 3 4 5 6 7 8

Major area _____

Minor area _____

_____ Associate degree

_____ Baccaluareate degree

_____ Masters degree

_____ Other, please specify _____

_____

Were you enrolled in a high school distributive education program?

_____ Yes (# of years _____) _____ No

Have you had any education training in the area of recruitment, selection and training of personnel?

_____ Yes _____ No

If yes, please explain _____

_____

Are you presently employed? _____ Yes _____ No

If yes, describe employment _____

_____

_____

Indicate total number of years of work experience related to your present field of study: _____

Do you have supervisory experience? _____ Yes _____ No

If yes, describe amount of experience _____

_____

Specify degree working toward and field of emphasis _____

_____

Indicate course in which this experiment is taking place _____

_____

Indicate sex (circle) M F

Please check the range your age falls within:

17 or under	_____	30-32	_____
18-20	_____	33-35	_____
21-23	_____	36-38	_____
24-24	_____	39-41	_____
27-29	_____	42 or over	_____

APPENDIX L

Competency Record

Student # _____

STUDENT COMPETENCY RECORD

Competency #	Passed Pre-Test (Circle One)	Indicate the number(s) of the activity(ies) selected.	Indicate time to successfully achieve this competeney including Pre- and Post Test. (Estimate time to closest possible minutes)
734	Yes No		
612	Yes No		
661	Yes No		
692	Yes No		
693	Yes No		
765	Yes No		
611	Yes No		
691	Yes No		
606	Yes No		
607	Yes No		
690	Yes No		
610	Yes No		
664	Yes No		
729	Yes No		

APPENDIX M

Human Subjects Approval and Related Materials

Protocol No. 78B 084

Original Review XX
Continuing Review ☐

149

THE OHIO STATE UNIVERSITY

RESEARCH INVOLVING HUMAN SUBJECTS

PROPOSED USE OF HUMAN SUBJECTS: ACTION OF THE REVIEW COMMITTEE

The Behavioral & Social Sciences Review Committee has taken the following action:

____ 1. Approve

__✓__ 2. Approve with Conditions

____ 3. Disapprove

with regard to the employment of human subjects in the proposed research entitled: Experimentation and Further Validation of the IDECC Competency Based Instructional Approach in Post-Secondary Education.

Terry M. Williams/Betty H. Turner is listed as the principal investigator.
119 Townshend, 1885 Neil Ave Mall

The conditions, if any, are attached and are signed by the committee chairperson and by the principal investigator. If disapproved, the reasons are attached and are signed by the committee chairperson.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject's participation in the proposed activity. Should the principal investigator leave the University, signed consent forms are to be transferred to the Human Subjects Review Committee for the required retention period.

Date February 24, 1978 Signed T J Kaul
(Chairperson)

Form PA-025

REVIEW OF RESEARCH, DEVELOPMENT, OR
RELATED ACTIVITIES INVOLVING HUMAN SUBJECTS

150

SUMMARY SHEET

PROTOCOL NO. 78B 084

(USE CONTINUATION PAGES AS NECESSARY)

PRINCIPAL INVESTIGATOR(S): Dr. Terry M. Williams, Project Director, Betty H. Turner, Project Coordinator

(DEPARTMENT & COLLEGE)

Interstate Distributive Education Curriculum Consortium (IDECC)

119 Townshend Hall, 1885 Neil Ave., Columbus, Ohio 43210

(FACULTY MEMBER'S CAMPUS MAILING ADDRESS)

PROTOCOL TITLE (INCLUDE PROPOSAL TITLE FOR EXTERNALLY-FUNDED ACTIVITIES IF THE TITLE IS DIFFERENT FROM THE PROTOCOL TITLE): Experimentation and Further Validation of the IDECC Competency Based Instructional Approach in Post-Secondary Education

WHEN SUBMITTING A PROPOSAL TO THE BEHAVIORAL AND SOCIAL SCIENCES HUMAN SUBJECTS REVIEW COMMITTEE, WE WOULD APPRECIATE YOUR SUPPLYING THE FOLLOWING INFORMATION IN SUMMARY FORM. HAVING THESE DETAILS PRIOR TO READING AND REVIEWING THE PROTOCOL CAN EXPEDITE THE PROCESS. PLEASE BE AS SPECIFIC AS POSSIBLE SUCH THAT THE READER CAN HAVE A RATHER COMPLETE AND ACCURATE IDEA OF EXACTLY WHAT YOUR SUBJECTS WILL EXPERIENCE WHEN THEY PARTICIPATE IN YOUR RESEARCH, AS WELL AS KNOW THE PROTECTIONS THAT HAVE BEEN INCLUDED TO SAFEGUARD THE SUBJECT AGAINST ADVERSE CONSEQUENCES (E.G., ARE THEY FREE TO NOT PARTICIPATE IF THEY CHOOSE, DO THEY OR THEIR PARENTS KNOW EXACTLY WHAT THEY ARE GETTING INTO BEFORE THEY ARE COMMITTED TO PARTICIPATE, WILL BOTH THEIR PARTICIPATION AND ANY COLLECTED DATA BE COMPLETELY CONFIDENTIAL).

1) IN A SENTENCE OR TWO, BRIEFLY DESCRIBE WHY THE PROPOSED PROJECT IS OF INTEREST. THE INTENT OF THIS QUESTION IS TO GIVE THE REVIEWER A BRIEF IDEA OF THE BACKGROUND AND PURPOSE OF THE RESEARCH.

The purpose of this project is to further develop and validate the IDECC system of learning. The project will evaluate through experimental research the IDECC competency based post-secondary instructional approach.

2) BRIEFLY DESCRIBE EACH OF THE DIFFERENT CONDITIONS OR MANIPULATIONS TO BE INCLUDED WITHIN THE STUDY.

Two methods of teaching approaches will be implemented; the traditional and IDECC approaches. The traditional approach will be decided upon from a general consensus of the instructors during a workshop previous to the study. The IDECC approach is a competency based instructional approach and consists of pre-test, objectives, learning activities and post-test. (See attached competency package)

3) WHAT IS THE NATURE OF THE MEASURES OR OBSERVATIONS THAT WILL BE TAKEN IN THE STUDY?

Measures which will be taken of all subjects consists of:

(1) A pre-test and post-test over the content of instruction.
(2) A 100 item quick work ability test.
(3) A background questionnaire of both subjects and instructors.

4) IF ANY QUESTIONNAIRES, TESTS, OR OTHER INSTRUMENTS ARE TO BE USED, PLEASE PROVIDE A BRIEF DESCRIPTION AND EITHER INCLUDE A COPY OR INDICATE APPROXIMATELY WHEN A COPY WILL BE SUBMITTED TO THE COMMITTEE FOR REVIEW.

(1) The pre and post-test will measure the student's knowledge over the instructional content. (See attached master list from which both pre and post-test will be drawn.)
(2) The 100 word quick word ability test is a vocabulary (continued on back)

Form RS-008A (8/77)

(continued)

4. test developed by Borgatta and Corsini (See attached).

(3) The questionnaires requests information which will be used in the report of the findings of the study. (See attached for both instructor and student questionnaire)

5) WILL THE SUBJECTS ENCOUNTER THE POSSIBILITY OF EITHER PSYCHOLOGICAL, SOCIAL, PHYSICAL OR LEGAL RISK?
☐ YES ☒ NO IF SO, PLEASE DESCRIBE.

6) WILL ANY STRESS BE INVOLVED IN THE STUDY? ☐ YES ☒ NO IF SO, PLEASE DESCRIBE.

7) WILL THE SUBJECTS BE DECEIVED OR MISLED IN ANY WAY? ☐ YES ☒ NO IF SO, PLEASE DESCRIBE AND INCLUDE A STATEMENT REGARDING THE NATURE OF THE DEBRIEFING.

8) WILL THERE BE ANY PROBING FOR INFORMATION WHICH AN INDIVIDUAL MIGHT CONSIDER TO BE PERSONAL OR SENSITIVE? ☒ YES ☐ NO IF SO, PLEASE DESCRIBE.

Background information questionnaire and word ability test may be considered probing. However, strict rules of confidentiality will be used. The ability test will be scored for all subjects in the investigating agency's location.

9) WILL THE SUBJECTS BE PRESENTED WITH MATERIALS WHICH THEY MIGHT CONSIDER TO BE OFFENSIVE, THREATENING OR DEGRADING? ☐ YES ☒ NO IF SO, PLEASE DESCRIBE.

10) APPROXIMATELY HOW MUCH TIME WILL BE DEMANDED OF EACH SUBJECT? 8 - 14 Hours

11) WHO WILL BE THE SUBJECTS IN THIS STUDY? HOW WILL THE SUBJECTS FOR THIS STUDY BE SOLICITED OR CONTACTED?

Post-secondary students will be the subjects of this study contacted through the instructors which volunteered to participate in the study.

12) WHAT STEPS WILL BE TAKEN TO INSURE THAT THE SUBJECT'S PARTICIPATION IS VOLUNTARY?

A behavioral and survey research form will be voluntarily signed by each subject. Instructors will be briefed in a workshop prior to the experiment on the importance of volunteer participation on the part of the subject.

13) IT IS IMPORTANT THAT A SUBJECT BE INFORMED REGARDING THE GENERAL NATURE OF WHAT HE WILL EXPERIENCE WHEN HE PARTICIPATES IN A STUDY, INCLUDING PARTICULARLY A DESCRIPTION OF ANYTHING HE MIGHT CONSIDER TO BE EITHER UNPLEASANT OR A RISK. PLEASE PROVIDE A STATEMENT REGARDING THE NATURE OF THE INFORMATION WHICH WILL BE PROVIDED TO THE SUBJECT PRIOR TO HIS VOLUNTEERING TO PARTICIPATE.

153

The subjects will be involved in an orientation which will include the following points:

(1) An explanation of the study.

(2) Explanation of the background questionnaire, the pre and post test and the ability test. (Continued on the back)

14) WHAT STEPS HAVE BEEN TAKEN TO INSURE THAT THE SUBJECTS GIVE THEIR CONSENT PRIOR TO PARTICIPATING? WILL A WRITTEN CONSENT FORM BE USED? ☒ YES ☐ NO IF SO, PLEASE INCLUDE IT. IF THE SUBJECTS ARE MINORS, WILL THEIR PARENTS' CONSENT BE OBTAINED? ☒ YES ☐ NO IF SO, PLEASE INCLUDE THE FORM AND IF NOT, PLEASE INDICATE WHY NOT.

It is not expected that subjects will be under 18. If this condition occurs subjects' parents will be asked to sign the behavioral and survey research form to acknowledge and consent involvement of the subject. (See attached for written consent form)

15) WILL ANY ASPECT OF THE DATA BE MADE A PART OF ANY PERMANENT RECORD THAT CAN BE IDENTIFIED WITH THE SUBJECT? ☐ YES ☒ NO

16) WILL WHETHER OR NOT A SUBJECT PARTICIPATED IN A SPECIFIC EXPERIMENT OR STUDY BE MADE A PART OF ANY PERMANENT RECORD AVAILABLE TO A SUPERVISOR, TEACHER OR EMPLOYER? ☐ YES ☒ NO

17) WHAT STEPS WILL BE TAKEN TO INSURE THE CONFIDENTIALITY OF THE DATA?

Numerical identification code will be used for all subjects rather than subject's name for all data collecting instruments.

18) IF THERE ARE ANY RISKS INVOLVED IN THE STUDY, ARE THERE ANY OFFSETTING BENEFITS THAT MIGHT ACCRUE TO EITHER THE SUBJECT OR SOCIETY?

No risks are anticipated.

19) WILL ANY DATA FROM FILES OR ARCHIVAL DATA BE USED? ☐ YES ☒ NO

****

(Continued)

13. (3) An assurance that all information will be confidential and names will not be attached to scores.

Purpose

You are involved in an experimental study which is being conducted to measure the achievement of post secondary students when using two different approaches to learning material. There are eight classes throughout the nation using the traditional approach and there are eight using the IDECC approach. Our class will be using the IDECC approach. This study will last approximately three to six weeks. You will be learning material which would ordinarily be taught in this course regardless of our involvement in this study.

Confidentiality

For the purpose of this study no names will be used. You will be assigned a number and will go by that number throughout the study. The only information the investigators will obtain in regard to identity is the number attached to any data submitted for processing. Your name and personal identity will not be revealed to anyone except myself (the instructor).

Testing and Questionnaire

In order to determine how much you actually learned from the teaching approach, it will be necessary for you to take a pretest and posttest. The pretest will tell us how much you know about the material now and the posttest will tell us how much you learned during the time the teaching approach was used.

A second evaluation instrument which will be given to you is a quick verbal ability test. The purpose of the ability test is to enable the investigators to determine if one approach of teaching is more effective than another depending on the individual student's ability.

You will be asked to complete a background questionnaire which will enable the investigators to make several comparisons in the study. Again, no names will be used on the questionnaires, only your assigned number. Data is gathered from you at different times, the assigned number is only for the purpose of keeping your individual data grouped.

Volunteer Participation

Your participation in this study is strictly at your own option; you may withdraw at any time. We must ask you to sign a form consenting to be a part of the study. The form still provides you with the withdrawal option at any time.

Protocol No. _____

RESEARCH INVOLVING HUMAN SUBJECTS
CONSENT TO SERVE AS A SUBJECT IN RESEARCH

156

BEHAVIORAL AND SURVEY FORM

I consent to serve as a subject in the research investigation entitled: Experimentation and Further Validation of the IDECC Competency Based Instructional Approach in Post-Secondary Education.

The nature and general purpose of the research procedure have been explained to me. This research is to be performed by or under the direction of Dr. Terry M. Williams, who is authorized to use the services of others in the performance of the research.

I understand that any further inquiries I make concerning this procedure will be answered. I understand my identity will not be revealed in any publication, document, recording, video-tape, photograph, computer data storage, or in any other way which relates to this research. Finally, I understand that I am free to withdraw my consent and discontinue participation at any time following the notification to the Project Director.

Signed _____
(Subject)

Date _____

Time _____ A.M. P.M.

_____
Witness (Instructor)

_____
Investigator - Betty H. Turner

Protocol No. 788 084

RESEARCH INVOLVING HUMAN SUBJECTS
CONSENT TO SERVE AS A SUBJECT IN RESEARCH

157

BEHAVIORAL AND SURVEY FORM

I consent to serve as a subject in the research investigation entitled: Experimentation and Further Validation of the IDECC Competency Based Instructional Approach in Post-Secondary Education.

The nature and general purpose of the research procedure have been explained to me. This research is to be performed by or under the direction of Dr. Terry M. Williams, who is authorized to use the services of others in the performance of the research.

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Signed _____
(Subject)

Date _____

Time _____ A.M. P.M.

_____
Witness (Instructor)

_____
Investigator - Betty H. Turner

BEHAVIORAL AND SOCIAL SCIENCES
HUMAN SUBJECTS REVIEW COMMITTEE (HSRC)
THE OHIO STATE UNIVERSITY

158

Submission Date: February 17, 1978 Protocol No.: 78B 084

Meeting Date: February 24, 1978

The research protocol entitled "Experimentation and Further Validation of the IDECC Competency Based Instructional Approach in Post-Secondary Education," by Terry M. Williams/Betty H. Turner
(Principal Investigator)
Vocational-Technical Education/Education
(Department & College)
119 Townshend, 1885 Neil Ave Mall
(Campus Address)

presented for review by the Human Subjects Review Committee to ensure the proper protection of the rights and welfare of the individuals involved with consideration of the methods used to obtain informed consent and the justification of risks in terms of potential benefits to be gained. The Committee action was:

- ☐ APPROVED
- ☒ APPROVED WITH CONDITIONS BELOW
- ☐ DEFERRED - COMMENTS BELOW
- ☐ DISAPPROVED
- ☐ NO REVIEW NECESSARY

(Signature of Committee Member)

CONDITIONS/COMMENTS:

The subjects were deemed not at risk and the protocol was approved with the following restrictions:

1. *If the students are graded, they should be graded in comparison to other students in their same learnig group or condition rather than in comparison to students in other learning groups or conditions.*

2. *Submit the information that will be given by the teachers at the onset of the study.*

3. *What, if any, provisions are made for students not to participate or to transfer to another section if they so choose?*

If you agree to the above conditions, please sign this form in the space(s) provided and return it with any additional information requested to Room 205, Ohio State University Research Foundation, 1314 Kinnear Road, Campus, within one week. Upon such compliance, the approval form will be mailed to you. (In the case of a deferred protocol, please submit the requested information at your earliest convenience. The next meeting of the Committee is two weeks from last meeting date.)

Date 2/28/78 Signature Betty H. Turner

Terry M Williams PhD
(Principal Investigators)

Date _____ Signature _____
(Chairman, Behavioral and Social Sciences Human Subjects Review Committee)

175

Form PA-025A

MEMO

To: Human Subjects Review Committee

From: Dr. Terry M. Williams/Betty H. Turner

Subject: Research Protocol entitled "Experimentation and Further Validation of the IDECC Competency Based Instructional Approach in Post Secondary Education - Protocal No. 78B084

Date: February 28, 1978

In regard to the prescribed restrictions in relation to the above study, the agreements and/or information are as follows:

Restriction #1

Students will not be graded in relation to students in other learning groups or conditions. Should the instructor wish to utilize posttest scores, they will be provided for grading purposes in comparison with the students in their own learning group only.

Restriction #2

See attached for information which will be given to the students at the onset of the study.

Restriction #3

Students may withdraw from a course at any time they wish in college accredited courses. If another section is available, instructors will be requested to provide the option of transfer.

APPENDIX N

IDECC and Traditional Workshop Agenda

Agenda

Post Secondary IDECC

Competency Based Education

Utilization of the IDECC System

Purpose of the Experimental Study

Mechanics of the Study

- Forms
  - Instructor Questionnaire
  - Instructor Consent Form
  - Student Consent Form
  - Student Questionnaire
  - Expense voucher
- Student Orientation for Study
- Student Code Numbers
- Tests
  - Ability
  - Pre & Post
- Mailing Procedures

IDECC Packets for Experimental Study

Management Techniques for IDECC

Student Orientation for IDECC

Student Competency Records

TRADITIONAL

Agenda

March 9, 10, 11, 1978

IDECC

Experimental Study

Forms

- Instructor Questionnaire
- Instructor Consent Form
- Student Consent Form
- Student Questionnaire
- Expense Voucher

Student Orientation

Student Code Numbers

Tests

- Ability
- Pre/Post

Mailing Procedures

What is traditional teaching?

- Define
- Activities
- Develop Lesson Plan Outline

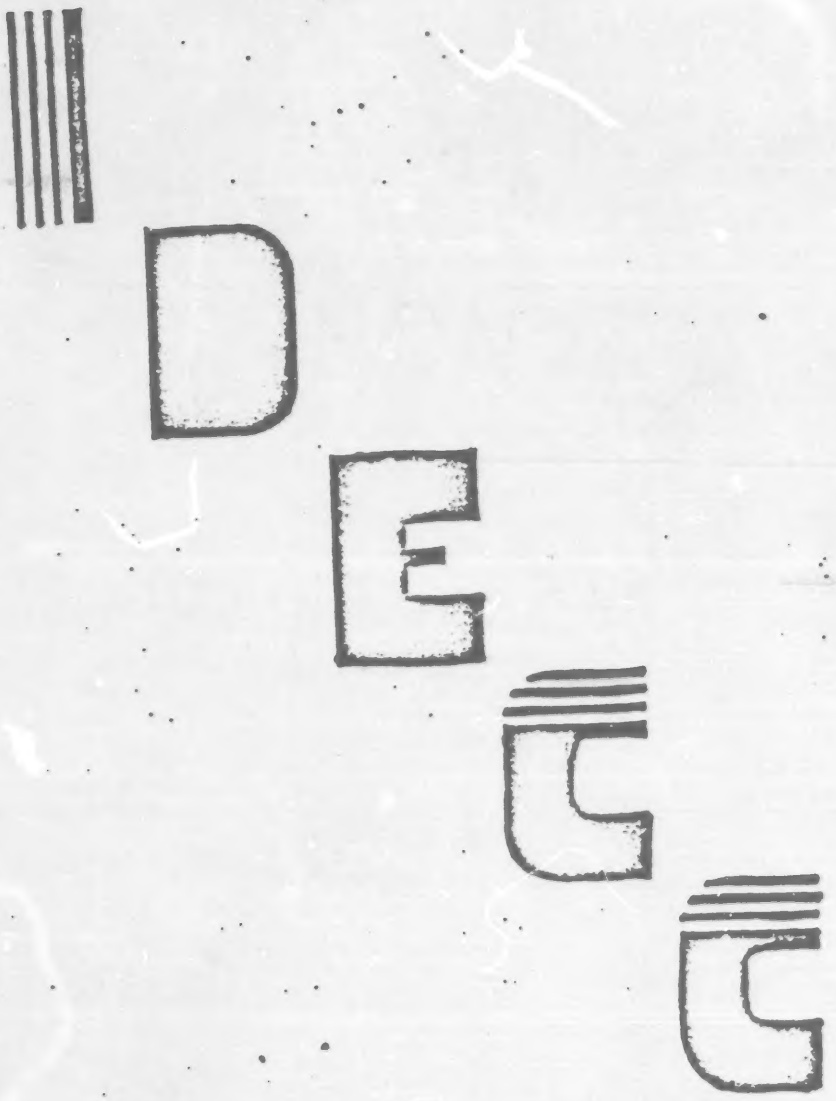
Developing a Unit of Study

- Review Unit Outline
- Review Objectives
- Review Resources
- Decide Activity for Each Objective
- Develop Lesson Plans
- Review Lesson Plans
- Edit Lesson Plans
- Develop Quizzes

APPENDIX O

IDECC Instructors "Orientation to IDECC"
Learning Activity Package

ORIENTATION TO



1.0

PRETEST

IDECC ORIENTATION

1. Define competency-based education.

2. What is the research upon which IDECC is based?

3. What occupational areas are included in IDECC?

4. List the curriculum sections in IDECC.

5. How does the student know what competencies to develop for their occupation?

6. What are the parts of an IDECC competency packet?

Learning Activities

IDECC ORIENTATION

COMPETENCY: Knowledge of competency-based education, IDECC as a competency-based curriculum and the parts of the IDECC competenc/ learning activity packet.

OBJECTIVES: Define competency-based education including three component parts.

Describe the research base of IDECC.

List the seven occupational areas presently existing in the IDECC system.

Identify the ten curriculum areas of IDECC in which competencies are developed.

Identify the sources which relate to the student the competencies which are needed for their chosen occupation.

List the parts of the IDECC competency learning packet including teacher materials.

DIRECTIONS: Select and complete one or more of the following:

3:0

Individual #1	Read pages 15 and 21 in the Learning Manager's Guide for IDECC.
or	
Individual #2	Read pages 11, 19 and 50 in Bold New Directions The Ohio Handbook for Effective Use of Laps.
or	
Group #3	Listen to the side tape, Sound of a Different Drummer, designate a chairman to present the group's response to meet the objective in this package.
or	
Group #4	Listen to a presentation on competency-based education, IDECC as a competency-based curriculum and the parts of the IDECC competency packet. Refer to Handouts #1, 2, 3A-B, 4.

OCCUPATIONAL CLUSTERS

DEPARTMENT STORE

ADVERTISING MANAGER
ASSISTANT BUYER
ASSISTANT CREDIT MANAGER
ASSISTANT DISPLAY MANAGER
ASSISTANT RECEIVING MANAGER
BUYER
CREDIT INTERVIEWER
CREDIT MANAGER
DEPARTMENT MANAGER
DISPLAY HELPER
DISPLAY MANAGER
PROFESSIONAL SALESPERSON
RECEIVING CLERK
RECEIVING MANAGER
SALESPERSON
STOCKPERSON

FOOD STORE

ASSISTANT MANAGER
CHECKER
GROUCERY CLERK
HEAD CASHIER
HEAD GROCERY CLERK
STORE MANAGER

HOTEL/MOTEL

ASSISTANT MANAGER
BELL CAPTAIN
BELLMAN
BUILDING SUPERINTENDENT
CATERING MANAGER
CHEF
EXECUTIVE HOUSEKEEPER
MANAGER
NIGHT AUDITOR
PURCHASING AGENT
RECREATION DIRECTOR
RESERVATION MANAGER
ROOM CLERK
SALES MANAGER
SERVICE SUPERINTENDENT

RESTAURANTS

ASSISTANT MANAGER
BUSBOY
CASHIER
HEAD WAITER
HOSTESS
MANAGER
WAITER/WAITRESS

SERVICE STATION

ASSISTANT MANAGER
ATTENDANT
MANAGER/DEALER

VARIETY STORE

ASSISTANT MANAGER
BUYER
CHECKOUT CASHIER
COMMISSIONED SALESPERSON
HEAD CASHIER/BOOKKEEPER
MARKER
OFFICE CLERK
PERSONNEL MANAGER
SALESPERSON
SECTION MANAGER
SERVICE DESK
STOCKROOM SUPERVISOR
STORE MANAGER

WHOLESALING

BUYER
HEAD BUYER
MERCHANDISER
ORDER SELECTOR
RECEIVING/SHIPPING SUPERVISOR
ROUTE SALESPERSON AND/OR VENDING MACHINE SPECIALIST
SALESMAN
SALES MANAGER
WAREHOUSE MANAGER

4:0

HANDOUT #2

IDECC ORIENTATION

TEN CURRICULUM SECTIONS

ADVERTISING

COMMUNICATIONS

DISPLAY

HUMAN RELATIONS

MANAGEMENT

MATHEMATICS

MERCHANDISING

OPERATIONS

PRODUCT / SERVICE TECHNOLOGY

SELLING

5:0

STUDENT COMPETENCY RECORD

B-5 FOOD STORE--HEAD GROCERY CLERK

COMMUNICATIONS

LAP 1--Interpretations of spoken words

_____111--Understanding that since interpretations placed on the spoken word vary with different people, one must be careful to speak so that correct interpretation can be made by individual listeners.

LAP 2-- unications

_____147--Attitude that in distributive occupations the "spoken word" is an important tool of the trade.

_____164--Development of an awareness that certain thoughtlessly used terms or words can be misinterpreted by the listener.

_____101--Knowledge of the situations in which to use a technical language or commonly understood language.

_____120--Skill in using the terminology of distribution and developing a vocabulary descriptive of the product or service being sold.

LAP 3--Use of speech and vocabulary

_____145--Attitude that poor or awkward grammer lowers store personnel, store image and merchandise value in the estimation of the customer.

_____152--Development of an appreciation of the value of correct enunciation and pronunciation in speaking.

_____137--Ability to talk clearly and pleasantly, conveying spirit and enthusiasm in one's speech.

_____122--Skill in effective use of appech and vocabulary.

LAP 5--Voice and gestures

_____166--Development of a realization that gestures help convey feelings in spoken communications.

_____151--Attitude that the tone of voice can express sincere welcome and eagerness to be of service.

_____150--Development of an awareness that the voice can be used to express conviction and convey confidence.

LAP 10--Point-of-sale signs

_____121--Skill in writing point-of-sale sign copy which is effective in conveying a sales message to the customer.

LAP 11--Developing phrases and sentences

_____132--Skill in developing descriptive phrases and sentences to be used in selling the merchandise in the department or store.

LAP 12--Translating technical words

_____143--Skill in translating technical words concerning an item of merchandise into the customer's language.

LAP 13--Selecting and using suitable words

_____123--Skill in selecting and using words suitable to the nature of the article of merchandise or service being sold.

LAP 14--Supplying "front operations" with price changes

_____171--Attitude that the "front operation" must be supplied with price lists (and price changes) on produce items not pre-priced or pre-weighed from the produce department.

LAP 16--Skill in communicating effectively

_____096--Knowledge of how to address other people in a business-like manner whether they are customers, fellow employees, supervisors or management.

_____127--Skill in communicating effectively with customers, co-workers and supervisors.

LAP 20--Customer inquiries and store policy

_____116--Skill in satisfactorily handling customer inquiries for general information,

_____117--Skill in interpreting store policies to customers.

LAP 24--Implementing directions and use of the telephone

_____119--Skill in listening to and following directions.

LAP 27--Written communications in forms and reports

_____094--Knowledge of how to use written communications in forms and reports.

RANDOLPH 15-A
169
MDCC 000

IDECC, COLUMBUS, OH

INDIVIDUALIZED DISTRIBUTIVE EDUCATION CAREER CURRICULUM MATRIX

COMPETENCIES	STUDENT	A8	A9	A11	A12	A14	B5	B6	C10	C11	C12	C14	C15	F13	C O
OCCUPATIONAL															
ADVERTISING															
LAP 1-USES & PURPOSES OF PROMOTIONAL & INSTITUTIONAL ADVERTISING															
	011	X	X	X	X	X	X	X						X	
	075		X		X		X	X	X	X	X	X	X	X	
	065		X		X		X	X						X	
	061		X		X		X	X		X	X	X	X	X	
	066		X		X			X		X	X	X		X	
	060		X		X				X	X	X	X	X	X	
	068		X		X		X	X				X		X	
	067		X		X		X	X						X	
	064		X	X	X			X						X	
	073			X	X		X	X						X	
	*001	X	X	X	X		X	X	X	X	X	X	X	X	
LAP 2-SELECTION OF MERCHANDISE FOR PROMOTION															
	004		X		X		X	X						X	
	062		X		X		X	X		X	X	X	X	X	
	072		X		X		X	X						X	
	012		X		X		X	X						X	
	014		X		X		X	X						X	
	063		X		X		X	X						X	
	016		X				X	X		X		X		X	
	050		X		X		X	X						X	
	*045		X					X		X		X		X	
LAP 3-SELECTION OF MEDIA &/OR METHOD															
	002		X		X		X	X				X		X	
	009		X		X		X	X		X	X	X	X	X	
	013		X					X				X		X	
	021							X							
	076							X							
	077							X							
	022							X							
	044		X					X		X		X		X	
	*051		X							X		X		X	
LAP 4-ADVERTISING MEDIA FOR DEPT. STORES															

HANDOUT #5-B

IDECC 000

170

183

189

HANDOUT #4

IDECC ORIENTATION

COMPETENCY LEARNING PACKAGE

STUDENT MATERIALS:

OBJECTIVE: ONE OR MORE. FOR EACH OBJECTIVE THERE ARE--

PRE-TEST

LEARNING ACTIVITIES:

MINIMUM OF FOUR ACTIVITIES

(ONE OF WHICH IS SELF CONTAINED)

AT LEAST 2 INDIVIDUAL

AND

AT LEAST 2 GROUP

POSSIBLE HANDOUTS

POST-TESTS

LEARNING MANAGER MATERIALS: TEST KEYS AND LEARNING MANAGER'S GUIDE

A COMPETENCY PACKAGE MAY HAVE ONE OR MORE OBJECTIVES IF NECESSARY TO DEVELOP THE COMPETENCY.

POSTTEST

IDECC ORIENTATION

1. Define competency-based education including three component parts.

2. Describe the research base of IDECC.

3. List the seven occupational areas included in the IDECC system.

   a. _____

   b. _____

   c. _____

   d. _____

   e. _____

   f. _____

   g. _____

4. List the ten curriculum sections of IDECC in which competencies may be developed.

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

g. _____

h. _____

i. _____

j. _____

5. Name two sources which may guide the student in determining the competencies to develop for their chosen occupation.

a. _____

b. _____

6. List the parts of the IDECC competency packet including the teacher materials.

10:0

APPENDIX P

Examples of a Competency Package Review Sheet

Competency:

Objective:

LEARNING ACTIVITIES:

Comment on the following:

1. Is the activity feasible and
   done in my class?
2. What problems may arise in th
   activity?
3. Implementation strategies

Individual #1:

Individual #2:

Group #3:

Group #4:

APPENDIX Q

Traditional Instructors Handbook

CONTENTS

Post Secondary Traditional

Steps in the Experimental Study

Student Code Numbers

Student Number Assignment Sheet

Student Orientation

Human Subject Consent Form

Student Questionnaire

Ability Test

Unit Outline

Objectives

Lesson Plans

Resources

Mailing Agenda

POST SECONDARY

Steps in Experimental Study

1. Orient Students

2. Have Students Sign Consent Form

3. Assign Student Numbers

4. Administer Student Questionnaire

5. Administer Ability Test

6. Administer Unit Pretest

7. Mail Student Numbers, Consent Forms, Student Questionnaires, Ability Test and Pretest with Answer Sheets. (Registered Mail)

8. Teach Unit

9. Administer Posttest

10. Mail Posttest and Answer Sheets. (Registered Mail)

STUDENT CODE NUMBERS

It is necessary to use student code numbers on all data gathering instruments in order to protect the identity of the student. The only form which will contain the student's name will be the student consent form. However, this form will not contain the number of the student.

In your folder, you will find a form with numbers. Indicate the numbers assigned to students by checking the appropriate numbers and return the form to the project office in the first mailing. On the form in your folder which has a space for the student's name beside the number, fill in the name beside the numbers which has been assigned to the student and retain the form for your reference. Student numbers must be entered on the following items. (Please be sure the number is accurate.)

1. Student Questionnaire
2. Ability Test
3. Pretest Answer Sheet
4. Posttest Answer Sheet

#	Student Name
22201	
22202	
22203	
22204	
22205	
22206	
22207	
22208	
22209	
22210	
22211	
22212	
22213	
22214	
22215	
22216	
22217	
22218	
22219	
22220	
22221	
22222	
22223	
22224	
22225	
22226	
22227	
22228	
22229	
22230	

STUDENT ORIENTATION
POST SECONDARY EXPERIMENTAL STUDY

Purpose

You are involved in an experimental study which is being conducted to measure the achievement of post secondary students when using two different approaches to learning material. There are eight classes throughout the nation using the traditional approach and there are eight using the IDECC approach. Our class will be using the Traditional approach. This study will last approximately three to six weeks. You will be learning material which would ordinarily be taught in this course regardless of our involvement in this study.

Confidentiality

For the purpose of this study no names will be used. You will be assigned a number and will go by that number throughout the study. The only information the investigators will obtain in regard to identity is the number attached to any data submitted for processing. Your name and personal identity will not be revealed to anyone except myself (the instructor).

Testing and Questionnaire

In order to determine how much you actually learned from the teaching approach, it will be necessary for you to take a pretest and a posttest The pretest will tell us how much you know about the material now and the posttest will tell us how much you learned during the time the teaching approach was used.

A second evaluation instrument which will be given to you is a quick verbal ability test. The purpose of the ability test is to enable the investigators to determine if one approach of teaching is more effective than another depending on the individual student's ability.

You will be asked to complete a background questionnaire which will enable the investigators to make several comparisons in the study. Again, no names will be used on the questionnaires, only your assigned number. Data is gathered from you at different times, the assigned number is only for the purpose of keeping your individual data grouped.

Volunteer Participation

Your participation in this study is strictly at your own option; you may withdraw at any time. We must ask you to sign a form consenting to be a part of the study. The form still provides you with the withdrawal option at any time.

Protocol No. _____

RESEARCH INVOLVING HUMAN SUBJECTS
CONSENT TO SERVE AS A SUBJECT IN RESEARCH

BEHAVIORAL AND SURVEY FORM

I consent to serve as a subject in the research investigation entitled: Experimentation and Further Validation of the IDECC Competency Based Instructional Approach in Post-Secondary Education.

The nature and general purpose of the research procedure have been explained to me. This research is to be performed by or under the direction of Dr. Terry M. Williams, who is authorized to use the services of others in the performance of the research.

I understand that any further inquiries I make concerning this procedure will be answered. I understand my identity will not be revealed in any publication, document, recording, video-tape, photograph, computer data storage, or in any other way which relates to this research. Finally, I understand that I am free to withdraw my consent and discontinue participation at any time following the notification to the Project Director.

Signed _____
(Subject)

Date _____

Time _____ A.M. P.M.

_____
Witness (Instructor)

_____
Investigator - Betty H. Turner

Student Code # _____

POST SECONDARY
STUDENT QUESTIONNAIRE

Please check education completed:

_____ High school or equivalent

_____ Vocational/technical school
Area of study _____

_____ College
Circle # of years completed:
1 2 3 4 5 6 7 8
Major area _____
Minor area _____

_____ Associate degree

_____ Baccaluareate degree

_____ Masters degree

_____ Other, please specify _____
_____

Were you enrolled in a high school distributive education program?

_____ Yes (# of years ____) _____ No

Have you had any education training in the area of recruitment, selection and training of personnel?

_____ Yes _____ No

If yes, please explain _____
_____

Are you presently employed? _____ Yes _____ No

If yes, describe employment _____
_____

Indicate total number of years of work experience related to your present field of study: _____

Do you have supervisory experience? _____ Yes _____ No

If yes, describe amount of experience _____
_____

Specify degree working toward and field of emphasis _____

_____

Indicate course in which this experiment is taking place _____

_____

Indicate sex (circle) M F

Please check the range your age falls within:

17 or under	_____	30-32	_____
18-20	_____	33-35	_____
21-23	_____	36-38	_____
24-24	_____	39-41	_____
27-29	_____	42 or over	_____

IBM 805
Test Sheet
185

QUICK WORD TEST: Level 1 – Form Bm

Edgar F. Borgatta
The University of Wisconsin

Raymond J. Corsini
University of California

Published by Harcourt, Brace & World, Inc.

Raw Score	%ile Rank	Stanine

Norms Group _____

DIRECTIONS: Fill in the answer space for the word that means the same as the first word. If you do not know, GUESS. Work quickly—**ANSWER ALL THE QUESTIONS.**
SAMPLE: happy dull seem **glad** fast

Name _____ Age _____

Place _____ Group _____ Sex _____

Date _____ 1 _____ 2 _____

1	nudge	coil	slab	roll	push	26	share	part	meal	coil	land	51	weird	tire	bore	note	eery	76	flunk	fail	bite	drop	dolt
2	quirk	fast	fate	rile	turn	27	feint	mock	weak	pale	fail	52	twist	onto	game	warp	whip	77	vista	call	doze	idle	view
3	tress	hair	robe	iron	hurt	28	tally	sift	glee	aide	mark	53	stern	rear	glum	rage	shop	78	ardor	zeal	iron	gilt	vine
4	grade	shop	curl	sort	fear	29	droop	iota	wilt	down	bite	54	quota	cite	part	read	atom	79	pound	oval	beat	lead	hear
5	crank	auto	tier	line	turn	30	droll	tart	turn	jest	drum	55	flesh	fast	lard	gilt	pulp	80	blank	shot	espy	void	area
6	trial	most	game	type	test	31	sneak	shoe	talk	lurk	ooze	56	greet	vast	live	like	hail	81	padre	rope	peal	boat	monk
7	winch	snub	reel	long	tape	32	rebel	ring	rise	best	hate	57	wrath	veil	mask	race	rage	82	facet	pair	turn	side	easy
8	tract	area	draw	pull	pact	33	stoke	post	poke	bomb	ship	58	irate	rant	lift	ired	like	83	quack	fake	duck	lack	slap
9	scout	risk	kind	male	look	34	blast	toot	holy	lush	gone	59	peace	fear	pact	gain	rule	84	prick	fool	hair	dirt	spur
10	mooch	loaf	much	romp	spry	35	cinch	fast	edge	limp	grip	60	elide	omit	dash	bump	trod	85	murky	fend	gray	scum	dark
11	noble	bill	high	gold	ring	36	stack	pile	pole	bend	nail	61	grime	smut	poem	fool	best	86	tempt	sexy	lead	time	wear
12	affix	gain	post	tire	mend	37	booty	shoe	find	swag	fine	62	draft	draw	wood	reef	hero	87	think	muse	whit	nick	know
13	tunic	song	clan	fish	robe	38	scoff	hurt	jeer	lose	lung	63	abyss	rule	duet	urge	gulf	88	gross	bulk	oily	ream	vile
14	vouch	back	sofa	free	ache	39	quote	root	part	cite	site	64	grave	rant	deep	dirt	tomb	89	primp	look	fuss	dent	evil
15	assay	rant	dolt	test	read	40	awful	load	fear	dire	vast	65	flout	hurt	jeer	fool	drop	90	covet	envy	coat	rill	love
16	tooth	fang	ease	smug	twin	41	shrub	wash	rasp	bush	tree	66	canal	duck	duct	rear	wade	91	panic	race	fear	save	tine
17	picot	soda	loop	jerk	atom	42	stuff	lout	hard	cram	junk	67	count	rich	main	rely	faze	92	parry	gala	hunt	fend	bear
18	tweak	lame	fall	jerk	wick	43	stilt	lean	pole	long	cane	68	inane	loco	pert	void	wise	93	exude	ooze	oust	lead	rule
19	stunt	feat	crag	jump	joke	44	model	chic	type	poem	rook	69	wharf	dock	bark	warp	blow	94	slope	ride	fall	slip	ramp
20	eject	stop	oust	vote	pull	45	smart	chic	good	nice	mode	70	caper	romp	ness	wrap	roll	95	yield	stop	save	rush	cede
21	agony	harm	away	pain	eral	46	humor	plus	boil	mood	play	71	cease	bend	open	stop	hire	96	proof	atop	eave	test	most
22	phase	sip	hunt	word	spar	47	slink	join	lurk	dark	murk	72	waver	sway	disk	abet	abut	97	parch	heat	burn	buff	lawn
23	haunt	bet	game	bulb	nest	48	screw	wax	iron	rift	turn	73	storm	wild	wash	dead	rave	98	evict	evil	base	oust	mean

204

205

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U.S.A. FORM I.T.S. 1000 8 7372

EMPLOYEE RECRUITMENT, TRAINING, & EVALUATION

A. Employee Recruitment

1. Determining the need for employees
2. Employee qualifications

B. Employee Selection & Placement

1. Interviewing employees
2. Selecting employees
3. Selecting within the organization
4. Use of store policies in hiring, promoting, and dismissing employees

C. Job Orientation

1. Efficiency in job orientation
2. Orientation and its relation to future job performance

D. Training Employees

1. Methods of training
2. Selecting and using training methods

E. Evaluating Employees

1. Evaluation procedure
2. Analyzing employee performance
3. Constructive criticism

OBJECTIVE: Given a specific situation, demonstrate the ability to determine when additional employees are needed.

OBJECTIVE: Respond to four questions based on a case study dealing with qualifications for recruiting new employees.

OBJECTIVE: You will demonstrate your knowledge of interview techniques by interviewing a potential employee, obtaining and offering all necessary data concerning the business, its operations and policies.

OBJECTIVE: Given a chart with three types of jobs listed, you will be able to list five physical, five mental, and five emotional requirements needed to perform each of the three jobs.

OBJECTIVE: Select the individual best suited for a position basing your decision on a job specification sheet and information concerning applicants for the position.

OBJECTIVE: Indicate a knowledge and understanding of present personnel policies for filling job vacancies, through written question/activities.

OBJECTIVE: Given a series of personnel problems you will demonstrate a knowledge and understanding of the relationship of company personnel policies to employment decisions.

OBJECTIVE: You will be able to identify a minimum of ten points/steps that will assure efficiency in job orientation training.

OBJECTIVE: You will describe the relationship between proper employee orientation and future job performance and discuss two approaches a supervisor may use to orient a new employee.

OBJECTIVE: Describe ten methods of training employees.

OBJECTIVE: Identify the most appropriate method of training an individual for expected job performance.

OBJECTIVE: To demonstrate knowledge and understanding of a store's procedure for evaluating employees, you will respond to four questions concerning evaluation procedures with 80% accuracy.

OBJECTIVE: You will be able to identify, in writing, three specific suggestions one should keep in mind when using records to analyze and supervise the work of employees at different levels, with 100% accuracy.

OBJECTIVE: You will be able to name a minimum of three guides/steps to be used when correcting an employee.

UNIT: Pre Recruitment, Training, and Evaluation

TOPICS: Pre-recruitment

(May want to add additional information on recruitment)

SUBTOPICS:
1. Determining the needs for employees
2. Employee Qualifications

TIME: 1 hour

OBJECTIVES: Given a specific situation, demonstrate the ability to determine when additional employees are needed.

Given a situation, identify qualifications for recruiting new employees.

MATERIALS AND RESOURCES: Text: Principles of Personnel Management by Edwin B. Flippo, p. 110-124

Supervision by Haimann & Hilgert, p. 121-123

METHOD: Lecture - Questions

LEARNING ACTIVITIES: The major function of personnel management is the procurement of personnel. However, the first step must precede the recruiting of personnel. There must be a determination of the kind of personnel desired for each job as well as the number to be hired.

JOB TERMINOLOGY: Position - A group of tasks assigned to one individual.

Job - A group of positions that are similar as to kind and level of work.

Occupation - is a group of jobs that are similar as to kind of work and are found throughout an industry or the entire country.

The U.S. Employment Service has attempted to survey and define the occupations of the U.S. in the Dictionary of Occupational Titles.

JOB ANALYSIS: The process of studying and collecting information relating to the operations and responsibilities of a specific job.

JOB DESCRIPTION: Is an organized, factual statement of the duties and responsibilities of a specific job

JOB SPECIFICATION: Is a statement of the minimum acceptable human qualities necessary to perform the job properly.

Post Secondary

Resources

Employee Recruitment, Training, & Evaluation

Retailing Management: A Planning Approach, Larry D. Redinbaugh, McGraw-Hill, 1976. Chapter 17.

Personnel Management, 5th Ed., Chruden/Shireman, South-Western, 1976. Chapters 5, 6, 8 (pp. 173-193), 10.

Principles of Personnel Management, 4th Ed., Flippo, Mc-Graw-Hill, 1976. Chapters 5 (pp. 84-86), 6, 7, 8, 10, 12, 13, 20 (pp. 437-443).

Supervision--Concepts and Practices of Management, 2nd Ed., Haimann/Hilgert, South-Western, 1977. Chapters 12, 13, 14, 17.

POINTS TO KEEP IN MIND WHEN USING RECORDS TO ANALYZE THE WORK OF EMPLOYEES

1. CAN BE USED FOR COMPARISON PURPOSES TO ANALYZE PERFORMANCE OVER A PERIOD OF TIME.

2. USE AS A GUIDE ONLY, WHEN MAKING A FINAL DECISION.

3. RECORDS SHOULD BE CAREFULLY STORED AND AVAILABLE ONLY TO THE PROPER AUTHORITY.

4. INFORMATION IN RECORDS SHOULD BE TREATED AS CONFIDENTIAL.

5. CAN BE HELPFUL IN WORKING/REPRIMANDING/CONGRATULATING AN EMPLOYEE.

6. RECORDS SHOULD BE PERIODICALLY CHECKED FOR COMPLETENESS, ACCURACY, AND UP-DATED PERIODICALLY.

WHAT ARE THE STEPS?

HERE ARE SIX BASIC STEPS IN PERFORMANCE EVALUATION:

6. TAKE APPROPRIATE ACTION.
5. DISCUSS THE EVALUATION WITH THE EMPLOYEE.
4. EVALUATE HIS PERFORMANCE AGAINST THE REQUIREMENTS.
3. OBSERVE WHAT HE IS DOING?
2. DISCUSS THE PERFORMANCE REQUIREMENTS WITH THE EMPLOYEE AND ADJUST THEM AS NEEDED.
1. PREPARE PERFORMANCE REQUIREMENTS. IN OTHER WORDS, DETERMINE HOW WELL YOU EXPECT THE EMPLOYEE TO DO HIS DUTIES.

PERCENTAGE OF ORGANIZATIONS

Employee Group	Type of Industry: Manufacturing	Type of Industry: Non-manufacturing	Type of Industry: Non-business	Size: Small	Size: Large	All Organizations
Production						
Formal Appraisal	44	38	68	49	46	47
Informal Appraisal	10	24	5	16	10	12
No Appraisal Program	46	38	27	35	44	41
Office						
Formal Appraisal	70	64	85	70	73	72
Informal Appraisal	24	22	6	23	17	19
No Appraisal Program	6	14	9	7	10	9
Sales						
Formal Appraisal	66	67	13	62	61	61
Informal Appraisal	28	22	-	24	23	24
No Appraisal Program	6	11	87	14	16	15
Professional/Technical						
Formal Appraisal	74	70	88	70	80	76
Informal Appraisal	21	17	3	22	11	16
No Appraisal Program	5	13	9	8	9	8
Supervisory (First Level)						
Formal Appraisal	75	69	85	70	80	76
Informal Appraisal	20	20	3	25	10	16
No Appraisal Program	5	11	12	5	10	8
Middle Management						
Formal Appraisal	74	69	74	64	78	72
Informal Appraisal	22	23	9	28	12	19
No Appraisal Program	4	8	17	8	10	9
Top Management						
Formal Appraisal	49	56	41	47	50	49
Informal Appraisal	29	25	18	30	22	25
No Appraisal Program	22	19	41	23	28	26

TRANSPARENCY E-1

ANALYZING EMPLOYEE PERFORMANCE:

1. Traditional Method
   a) The manager fills out a rating form of employee traits that are observable and universal to job. (Tends to be subjective.)
      1. Graphic rating
      2. Checklist method
      3. Ranking method
   b) Problem areas of above
      1. Clarity in standards
      2. Perception problems
      3. Halo effects
      4. Expressive tendency or resistance
      5. Confidentiality
2. Newer approaches (Tends to be objective)
   1. Forced - Choice
   2. Forced - Distribution
   3. Critical - Incident method
   4. Field - Review
   5. Assessment Centers
   6. M.B.O.

   Problems with above
   1. Cost
   2. Performance traits
   3. Time and expertise
3. Constructive Criticism:
   a) Objective of feedback
   b) Use of evaluation
      1. M.B.O. as a guide
      2. Tell and Sell
      3. Tell and Method
      4. Problem-solving method

4. Closed loop
   a) Setting new performance approval goals

SUMMARY: Summarize as necessary
Hand out Case at end of lecture (Case E-1, Petri Chemical Co.)
Have completed by next class for discussion

UNIT: Employee Recuitment, Training and Evaluation

TOPIC: Evaluating Employees

TIME: 2 hours (one hour lecture/one hour case study and discussion)

SUBTOPIC:
1. Evaluation procedure
2. Analyzing Employees
3. Constructive Criticism
4. Closed loop

OBJECTIVES: Provide the student with the necessary knowledge to identify needs for evaluation.

Given a written case, the student will be able to (1) identify the need for an evaluation program, (2) evaluate the data in the case and make a comparison between the traditional and newer approach in analyzing employee performance, (3) based on his comparison, select the approach which best fits the case and (4) design an employee feedback process to correct the problem(s) in the case.

MATERIALS AND RESOURCES:
A. Supervision: Haimann & Hilgert
B. Personnel Management, Chruden/Sherman, 5th Ed., pp. 221-237

METHOD: Lecture, Case Study and Discussion (Case Study E-1 to be handed out at the end of lecture).
For teacher notes see Chruden/Sherman pp. 221-237.

EVALUATION PROCEDURE:
1. Why evaluate employees?
2. What are the objectives of evaluation process? (Transparency E-1, Percentage of Organizations)
   a. Help supervisors to observe their subordinates
   b. To help in coaching
   c. To provide feedback
   d. Improve organizational efficiency
   e. Used as a basis for future managerial decisions.
3. The Evaluation process (Transparency E-2, What are the Steps)
   1. Prepare performance requirements. In other words, determine how well you expect the employee to do his duties.
   2. Discuss the performance requirements with the employee and adjust them as needed.
   3. Observe what he is doing?
   4. Evaluate his performance against the requirements.
   5. Discuss the evaluation with the employee.
   6. Take appropriate action.

The wrong case was typed for this section. We will send you the correct one as soon as possible.

EXTENT TO WHICH TRAINING TECHNIQUES UTILIZE CERTAIN PRINCIPLES OF LEARNING

	Motivation: Active Participation Of Learner	Reinforcement: Feedback of Knowledge of Results	Stimulus: Meaningful Organization Of Materials	Responses: Practice And Repetition	Stimulus-Response Conditions Most Favorable For Transfer
On-the-Job Techniques					
Job-Instruction Training	Yes	Sometimes	Yes	Yes	Yes
Apprentice Training	Yes	Sometimes	?	Sometimes	Yes
Internships and Assistantships	Yes	Sometimes	?	Sometimes	Yes
Job Rotation	Yes	No	?	Sometimes	Yes
Junior Board	Yes	Sometimes	Sometimes	Sometimes	Yes
Coaching	Yes	Yes	Sometimes	Sometimes	Yes
Off-the-Job Techniques					
Vestibule	Yes	Sometimes	Yes	Yes	Sometimes
Lecture	No	No	Yes	No	No
Special Study	Yes	No	Yes	?	No
Films	No	No	Yes	No	No
Television	No	No	Yes	No	No
Conference or Discussion	Yes	Sometimes	Sometimes	Sometimes	No
Case Study	Yes	Sometimes	Sometimes	Sometimes	Sometimes
Role Playing	Yes	Sometimes	No	Sometimes	Sometimes
Simulation	Yes	Sometimes	Sometimes	Sometimes	Sometimes
Programmed Instruction	Yes	Yes	Yes	Yes	No
Laboratory Training	Yes	Yes	No	Yes	Sometimes
Programmed Group Exercises	Yes	Yes	Yes	Sometimes	Sometimes

TRANSPARENCY D-1

EXTENT TO WHICH TRAINING TECHNIQUES UTILIZE CERTAIN PRINCIPLES OF LEARNING

	Motivation: Active Participation Of Learner	Reinforcement: Feedback of Knowledge of Results	Stimulus: Meaningful Organization Of Materials	Responses: Practice And Repetition	Stimulus-Response Conditions Most Favorable For Transfer
On-the-Job Techniques					
Job-Instruction Training	Yes	Sometimes	Yes	Yes	Yes
Apprentice Training	Yes	Sometimes	?	Sometimes	Yes
Internships and Assistantships	Yes	Sometimes	?	Sometimes	Yes
Job Rotation	Yes	No	?	Sometimes	Yes
Junior Board	Yes	Sometimes	Sometimes	Sometimes	Yes
Coaching	Yes	Yes	Sometimes	Sometimes	Yes
Off-the-Job Techniques					
Vestibule	Yes	Sometimes	Yes	Yes	Sometimes
Lecture	No	No	Yes	No	No
Special Study	Yes	No	Yes	?	No
Films	No	No	Yes	No	No
Television	No	No	Yes	No	No
Conference or Discussion	Yes	Sometimes	Sometimes	Sometimes	No
Case Study	Yes	Sometimes	Sometimes	Sometimes	Sometimes
Role Playing	Yes	Sometimes	No	Sometimes	Sometimes
Simulation	Yes	Sometimes	Sometimes	Sometimes	Sometimes
Programmed Instruction	Yes	Yes	Yes	Yes	No
Laboratory Training	Yes	Yes	No	Yes	Sometimes
Programmed Group Exercises	Yes	Yes	Yes	Sometimes	Sometimes

HANDOUT D-1

UNIT: Employee Recruitment, Training and Evaluation 198

TOPIC: Training Employees
1) Methods of Training
2) Selecting and using training methods

TIME: 1 hour

OBJECTIVE: Describe ten methods of training employees

Identify the most appropriate method of training an individual for expected job performance.

MATERIALS: Transparency D-1, Extent to Which Training Techniques Utilize Certain Principles of Learning, pp. 188, Personnel Management, Chruden/Sherman
Handout D-1, pp. 188, Personnel Management, Chruden/Sherman

Teacher Reference Materials: Personnel Management, Chruden/Sherman, pp. 176-194.
Principles of Personnel Management, Flippo, pp. 213-223.

METHOD: Lecture about types, methods and principles of training and learning using the overhead transparency and questioning of students regarding how they were trained and what facilitated their learning.

LEARNING ACTIVITIES: Students will take notes, listen to lecture, and respond to questions.

SUMMARY: Summarize the importance of training for various types of occupations. Distribute Handout D-1.

SUGGESTED ASSIGNMENT: Chruden/Sherman, Personnel Management, Performance Evaluation, pp. 221-238.
Haimann-Hilgert, Appraisal, Supervision, pp. 222-239.

STEPS IN JOB ORIENTATION

1. WELCOME TO DEPARTMENT AND JOB.
2. ACQUAINT WITH AREA TO BE USED FOR STORAGE OF PERSONAL ITEMS.
3. ASSIGN TO SPECIFIC SELLING AREA.
4. REVIEW STOCK AND ITS LOCATION.
5. INTRODUCE TO FELLOW WORKERS.
6. GO OVER SCHEDULE - HOURS OF WORK, LUNCH PERIOD, BREAKS.
7. ASSIGN FELLOW EMPLOYEE TO WORK WITH.
8. DISCUSS BASIC SAFETY RULES.
9. START EMPLOYEE ON JOB.
10. OFFER ASSISTANCE AND GUIDANCE AT ANY TIME.
11. FOLLOW-UP.

200

LATER DURING FIRST DAY:

- ☐ REVIEW PAY PROCEDURE.
- ☐ DISCUSS PARKING, CAR-POOLS.
- ☐ EXPLAIN DISPENSARY FACILITIES.
- ☐ REVIEW SAFETY RULES.
- ☐ BRIEFLY TELL ABOUT WORK OF DEPARTMENT AND HOW EMPLOYEE'S JOB TIES IN.
- ☐ SHORTLY BEFORE QUITTING TIME, CHECK WITH EMPLOYEE ON PROGRESS AND ANY QUESTIONS.

DURING FIRST TWO WEEKS:

- ☐ REVIEW BENEFIT PLANS*
  - INSURANCE AND M. B. A.
  - STOCK BONUS
  - PENSION
  - RELIEF AND LOAN
  - SUGGESTION SYSTEM
- ☐ REVIEW ITEMS IN "YOUR GUIDE TO THE RIVER WORKS."
- ☐ CHECK ON SAFETY HABITS.
- ☐ CONTINUE TO FOLLOW UP ON PROGRESS AND PERFORMANCE.

---

*PLANS FOR WHICH EMPLOYEE SIGNED APPLICATIONS IN EMPLOYMENT OFFICE AND UNDERLINED.

TRANSPARENCY TAKEN FROM, PERSONNEL MANAGEMENT, CHRUDEN/SHERMAN, P. 175.

CHECKLIST FOR HELPING THE NEW EMPLOYEE GET STARTED

WHEN EMPLOYEE FIRST REPORTS:

- ☐ WELCOME TO COMPANY AND JOB.
- ☐ SHOW LOCKER OR COAT RACK AND WASH ROOM.
- ☐ ACQUAINT EMPLOYEE WITH CAFETERIA AND OTHER LUNCH FACILITIES.
- ☐ REVIEW SECURITY REGULATIONS INCLUDING BADGE SYSTEM.
- ☐ SHOW WORK PLACE
- ☐ REVIEW RATE, HOURS, USE OF TIME CARD.
- ☐ BRIEFLY DESCRIBE GROUP'S WORK.
- ☐ INTRODUCE TO FELLOW WORKERS.
- ☐ START EMPLOYEE ON JOB, REMEMBERING THE FOUR STEPS OF INSTRUCTION.
    1. PREPARE THE WORKER.
    2. PRESENT THE OPERATION.
    3. TRY OUT HIS PERFORMANCE.
    4. FOLLOW UP.
- ☐ BRIEFLY COVER MAIN SAFETY RULES AND USE OF SAFETY EQUIPMENT.
- ☐ REMIND EMPLOYEE TO COME TO YOU FOR INFORMATION AND ASSISTANCE.

LATER DURING FIRST DAY:

- ☐ REVIEW PAY PROCEDURE.
- ☐ DISCUSS PARKING, CAR-POOLS.
- ☐ EXPLAIN DISPENSARY FACILITIES.
- ☐ REVIEW SAFETY RULES.
- ☐ BRIEFLY TELL ABOUT WORK OF DEPARTMENT AND HOW EMPLOYEE'S JOB TIES IN.
- ☐ SHORTLY BEFORE QUITTING TIME, CHECK WITH EMPLOYEE ON PROGRESS AND ANY QUESTIONS.

DURING FIRST TWO WEEKS:

- ☐ REVIEW BENEFIT PLANS*
  - INSURANCE AND M. B. A.
  - STOCK BONUS
  - PENSION
  - RELIEF AND LOAN
  - SUGGESTION SYSTEM
- ☐ REVIEW ITEMS IN "YOUR GUIDE TO THE RIVER WORKS."
- ☐ CHECK ON SAFETY HABITS.
- ☐ CONTINUE TO FOLLOW UP ON PROGRESS AND PERFORMANCE.

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*PLANS FOR WHICH EMPLOYEE SIGNED APPLICATIONS IN EMPLOYMENT OFFICE AND UNDERLINED.

HANDOUT TAKEN FROM, PERSONNEL MANAGEMENT, CHRUDEN/SHERMAN, P. 175.

CHECKLIST FOR HELPING THE NEW EMPLOYEE GET STARTED

WHEN EMPLOYEE FIRST REPORTS:

- ☐ WELCOME TO COMPANY AND JOB.
- ☐ SHOW LOCKER OR COAT RACK AND WASH ROOM.
- ☐ ACQUAINT EMPLOYEE WITH CAFETERIA AND OTHER LUNCH FACILITIES.
- ☐ REVIEW SECURITY REGULATIONS INCLUDING BADGE SYSTEM.
- ☐ SHOW WORK PLACE
- ☐ REVIEW RATE, HOURS, USE OF TIME CARD.
- ☐ BRIEFLY DESCRIBE GROUP'S WORK.
- ☐ INTRODUCE TO FELLOW WORKERS.
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    1. PREPARE THE WORKER.
    2. PRESENT THE OPERATION.
    3. TRY OUT HIS PERFORMANCE.
    4. FOLLOW UP.
- ☐ BRIEFLY COVER MAIN SAFETY RULES AND USE OF SAFETY EQUIPMENT.
- ☐ REMIND EMPLOYEE TO COME TO YOU FOR INFORMATION AND ASSISTANCE.

Introduction to supervisors
Dispensary facilities
Fringe benefits
Illness policies
Personal leave policies
Union policies
Employee performance review
Phone policies
Uniforms necessary

- Orientation can be for current employees as well as new employees
  i.e. - Explanation of a new group health insurance program
- Methods of orienting employees
  Departmental meetings
  Checklist transparency C-1, p. 175
  Buddy system - work with co-worker
  Company hand book
- Benefits derived from proper orientation especially long term employee and firm benefits
  - Reduces anxiety - improves employee morale
  - Reduces turnover

LEARNING ACTIVITY: The students will respond to questions, give personal experiences, and take notes.

SUMMARY: Pass out handout C-1 as reinforcement tool

UNIT: Employee Recruitment, Training and Evaluation 205

TOPIC: Job Orientation

TIME: 1 hour

OBJECTIVES:
1. To provide students with the information necessary to identify techniques that will assure efficiency in job orientation training.
2. To provide students with the information necessary to select a proper orientation procedure for a specific orientation topic from several alternative procedures.
3. To provide the students with the information necessary to allow them to describe the relationship between effective job orientation and future job performance.

MATERIALS:
Supervision
by Haimann & Hilgert, p. 217-218

Personnel Management
by Chruden/Sherman, p. 173-176
Handout: Checklist of Orientation Topics, Handout C-1

Transparency C-1: Checklist of Orientation Topics
Transparency C-2: Steps in Efficiency in Job Orientation

METHODS:
1. Conduct Group Discussion
   - How many in class work
   - Describe what was done for your job orientation
   - Were there any important items you feel you should have learned during orientation, but learned from other sources, i.e. grape vine, discussion with co-workers, found out while being reprimanded.
2. Lecture - Topical Outline follows below

- Items that are possible orientation topics
  Working hours
  Pay
  Parking
  Plant tour
  Safety rules
  Security rules
  Food resources
  Recording of time worked
  Job's relation to total company
  Introduction to fellow workers

POLICIES FOR PROMOTING AND DISCIPLINING EMPLOYEES

I. PROMOTING EMPLOYEES

A. PROMOTION POLICY

B. CRITERIA FOR PROMOTION
   1. SENIORITY
   2. MERIT AND ABILITY
   3. BALANCING THE CRITERIA

II. TAKING DISCIPLINARY ACTION

A. INVESTIGATE FIRST

B. DISCIPLINE IN PRIVATE

C. PROGRESSIVE DISCIPLINE
   1. THE INFORMAL TALK
   2. ORAL WARNING OR REPRIMAND
   3. WRITTEN OR OFFICIAL WARNING
   4. DISCIPLINARY LAYOFFS
   5. DEMOTION
   6. DISCHARGE

D. TIME ELEMENT FOR ABOVE

E. THE "HOT STOVE RULE" (DISIPLINE DIRECTED AGAINST THE ACT RATHER THAN AGAINST THE PERSON)
   1. IMMEDIACY
   2. ADVANCE WARNING
   3. CONSISTENCY
   4. IMPERSONALITY
   5. DOCUMENTATION

F. THE RIGHT TO APPEAL

George Mason was foreman of the Production Department of a small manufacturing company. Most of the time, he supervised about eight to ten people. One of the employees was Paula Whisler, a black employee, 38 years old, who was a widow with five small children. Paula was a very good worker, but she almost always was late for work in the morning. George had spoken to Paula numerous times about tardiness, but to no avail. Paula assured him that she tried hard to be at work on time, but she "just did not seem to be able to make it" at 7:30 a.m., since she had to get her children off to school and to the babysitter. Paula argued that she worked twice as hard as anyone else, and that she stayed over in the evening to make up for the time she lost in the mornings. There was little doubt in George Mason's mind that Paula Whisler did produce as much or more than anyone else, and that she actually did stay later in the evening to make up the time she lost by being late in the morning.

On Thursday morning, however, Paula's tardiness was holding up a job which had to be finished by noon. Regardless of how hard she might work during the morning, it would be difficult to finish the job on time since the production material had to dry out for three hours before it could leave the department. Although some other worker could have performed the operation, the foreman felt that Paula was most qualified to do it. But should Paula not come in at all or be quite late, again the entire production schedule would be thrown out of balance. All of this was going trough George's mind when he heard one of theworkers say to one of the others, "That gal Whisler is getting preferred treatment; why sould a black be given any favors, like she's better than the rest of us?"

Sure enough, Paula arrived forty-five minutes late. George Mason realized that the situation required action on his part, but he didn't know what it should be.

Mr. Jack Wilder, Sr., is principal buyer for Ajax Hardware Stores, a large hardware company in Metro City. In this capacity he is an important customer of the C & A Metal Co. During a year's time, Mr. Wilder, Sr., buys hundreds of thousands of dollars worth of metal garden furniture from C & A, which represents between 30 and 40 percent of C & A's annual sales volume. When Mr. Art Freund, the sales manager of C & A, was making a call on Mr. Wilder, the latter asked Mr. Freund to check with the president of C & A to see whether he could find a job for his son, who had dropped out of college and who wanted to find work in industry. Mr. Freund assured him that he would do his best and would let him know soon.

After a brief discussion and considering the importance of the account, the president of C & A asked Jack Wilder, Jr., to come to his office for an interview. Jack, Jr., was hired and was given the position of assistant to the plant superintendent, reporting to Mr. Phil Sullivan, the C & A plant superintendent. Mr. Sullivan had been appraised of the customer connection involved, and he was not given any choice in the selection of Jack, Jr. Jack, Jr.'s, job duties essentially consisted of doing things which Mr. Sullivan chose to delegate to him, that is, he had a personal staff position.

Initially, Mr. Sullivan was very impressed with Jack's willingness to learn, his astuteness, and efforts. After a number of weeks, Mr. Sullivan informed the president of C & A, "how well young Wilder is coming along," and this information was reported to Mr. Wilder, Sr., the next time Mr. Freund, the sales manager, called on him. All went smoothly for a few months, and the orders from Ajax Hardware Stores were increasing at a growing rate. There was no way to judge whether this increase in orders

was due to the good news about Jack, Jr., to a business upturn, or whether it was preferential treatment.

However, after about four months of work, Jack, Jr.'s job performance took a turn for the worse. His initial enthusiasm seemed to decrease, his attitudes left much to be desired, and he seemed to care less and less about how he was doing his job. Mr. Sullivan had a few friendly talks with Jack, Jr., during which Jack, Jr., told Mr. Sullivan, "I can always work in my old man's firm if this job doesn't work out."

Mr. Sullivan kept the president of C & A informed about these incidents. Jack, Jr., repeatedly missed a day or two days of work without notifying his boss or having an excuse. When Mr. Sullivan discussed this with him, Jack, Jr., showed indifference to what his boss had to say.

This went on for about two more months, and Mr. Sullivan felt that Jack, Jr., should be terminated since he no longer was an effective assistant. However, Mr. Sullivan was reluctant to do this, since he was aware of the connection between Jack Wilder, Jr., Jack Wilder, Sr., and the C & A Company's business dependency upon Ajax Hardware Stores. Mr. Sullivan pondered what he should do.

John Schneider had just been informed that a young man named Kirk Bell had been hired from outside the firm for the position of vice-president of manufacturing, a job which John very much wanted to have. The young man who was hired is in his early thirties and has an undergraduate engineering degree, a master's degree in business administration, and some previous working experience.

John Schneider is 50 years old, and at present holds the position of plant superintendent of the Central Metalworks Company. He has been with this firm for almost 30 years, working his way up from the bottom-starting as a machine operator; working up to leadman; to various foremen's positions; the assistant superintendent's job; and, for the last seven years, plant superintendent.

John had no formal schooling after finishing high school, but he had a well-recognized talent for machines, tools, and anything associated with manufacturing metal parts. John also had an excellent ability to work with people, and he was well-liked and respected by the employees.

When the president of the company, Mr. Allen, told John Schneider who his new boss would be, John replied, "I don't know whether I can work for a young man twenty years my junior, especially one who never dirtied his hands fixing or running a piece of machinery. What can a fellow like this possibly know about running a manufacturing plant?"

A few days later, Mr. Allen met with Mr. Bell in his office.

"Kirk," said Mr. Allen, "I think you may have a serious problem with John Schneider. He's a good man, but his feelings are hurt, and he thinks he's been demoted. What would you propose to do to win him over?"

Case 8-1
"Just One More Change"

Martinson's Department Store has been serving the community for over 100 years. It is recognized as the leading store of its type and its image is one of quality and service. Because of these characteristics and its sponsorship and support of many community projects, the store has created an excellent image among the residents. As the community has grown, so has Martinson's. It now has five stores with over 1,500 employees. While it is not stated policy, Martinson's will not employ anyone who has a conviction record other than for a minor traffic violation.

Richard Weight, age 26, made application for employment as a sales clerk at Martinson's. During the employment interview he was asked if he had ever been convicted for other than a minor traffic violation. His response was "no." Since he appeared to meet all qualifications, Wright was hired as a part-time sales clerk pending a vacancy for full-time work. When he was given a form to be completed for the bonding company, Wright asked the personnel representative if he should include a shoplifting incident that occurred when he was 11 years old and had since been expunged from the police records. He was advised to put it down. As soon as the form reached the security office at Martinson's, the personnel department was advised that Wright's services would have to be terminated.

Wright had been called in to work three different times before this order was received from security. The manager of the department where he was assigned to fill in said that he was one of the best clerks they had working for them. Security, however, had the final word and Wright would have to go in spite of attempts made by the personnel representative to convince them that his man deserved another chance.

a. With whom do you agree- the personnel representative or the security department? Why?
b. Is the store living up to the image that it has in the community?

UNIT: Employee Recruitment, Training, and Evaluation

TOPIC: Employee Selection and Placement

SUBTOPIC: Use of store policies in hiring, promoting and dismissing employees

TIME: 1 hour (1 class period) to 1½ hours.

OBJECTIVE: Demonstrate a knowledge and understanding of present personnel policies for filling job vacancies and other employment decisions.

MATERIALS AND RESOURCES:

Texts: Personnel Management, 5th Ed., Cruden/Sherman
Handout: Case 8-1 "Just One More Change", p. 143

Supervision: Haimann/ Hilgert
Handouts: Case 8-2 "The Quasi-Demotion", p. 242
Case 8-3 "The Customer's Son," p. 241
Case 8-4 "The Problem of Preferential Treatment", p. 295

Transparency 8-3 - Policies for Promoting and Disciplining Employees.
Taken from pp. 233-236, pp. 279-290
Copies of transparencies 8-1 and 8-3.

METHODS: (Continue from lecture and discussion of Lesson Plan 8-1,2,3.
Lecture (from transparency 8-3) and case studies 8-1,2,3,4.

Divide class into 3 or *4 groups and have each group read and present their solutions to one case each.

REVIEW: As time permits.

SUMMARY: Distribute copies of transparencies 8-1 and 8-3.

* (As class size and time permits)

TRANSPARENCY #B-2
#3 OF 3

EMOTIONAL REQUIREMENTS

SLOW TO ANGER

PLEASANT DISPOSITION

ABLE TO WORK WITH OTHERS

GOOD PERSONALITY

GOOD ATTITUDE

ABLE TO WORK ALONE

COURTEOUSNESS

INDUSTRIOUSNESS

ABLE TO HANDLE UNPLEASANT SITUATIONS

ABLE TO CONTROL TEMPER

PHYSICAL REQUIREMENTS

ABILITY TO LIFT

ABILITY TO STAND ON FEET

NOT FATIGUE EASILY

GOOD SPEECH

GOOD VISION

GOOD LEARNING

GOOD MANUAL DEXTERITY

ENDURANCE

ABLE TO DISCRIMINATE COLORS

TRANSPARENCY #B-2
#1 OF 3

MENTAL REQUIREMENTS

ALERTNESS

ORGANIZATION

ACCURACY

HONESTY

DESIRE TO LEARN

INTELLIGENCE

INTEREST IN JOB

INITIATIVE

CONCENTRATION

LEADERSHIP

INTERVIEWING AND SELECTING NEW EMPLOYEES

I. INTERVIEWING SKILLS

- A. DIRECTIVE INTERVIEWS
- B. NON-DIRECTIVE INTERVIEWS
- C. PURPOSE OF INTERVIEWS

II. EMPLOYMENT SELECTION INTERVIEWING

- A. PREPARING FOR THE INTERVIEW
  1. BACKGROUND INFORMATION
  2. INTERVIEW PLAN
  3. PROPER PHYSICAL SETTING
  4. PUTTING THE APPLICANT AT EASE
- B. CONDUCTING THE INTERVIEW
  1. OUTLINE OF JOB DETAILS (SEE TRANSPARENCY #B-2)
  2. TYPES OF QUESTIONS
- C. PITFALLS IN APPLICATION EVALUATION
  1. HALO EFFECT
  2. OVERGENERALIZATION
  3. COMPARISON WITH CURRENT EMPLOYEES
  4. EXCESSIVE QUALIFICATIONS
- D. CLOSING THE INTERVIEW
- E. MAKING THE EMPLOYMENT DECISION

UNIT: Employee Recruitment, Training and Evaluation 218

TOPIC: Employee Selection and Placement

TIME: 1½ hours (1 hr. lecture; ½ hr. role-play)

OBJECTIVES: Demonstrate knowledge of interview techniques, job descriptions and requirements, and process of matching applicants and positions.

Given a specific job, be able to list 5 physical, 5 mental, 5 emotional requirements needed to perform that job.

MATERIALS AND RESOURCES: Supervision: by Haiman & Hilgert, p. 205-217.
Handouts: 1) Job Description, Handout A-1
2) Application Blank, Handout A-2
Transparency #81: Interviewing and Selecting New Employees
Transparency #82: Listing of physical, mental, emotional requirements

METHODS: Lecture and discussion of transparancies 8-1 & 8-2

Collect completed application blank (assigned and distributed previously, along with job description)

Have student act as interviewer (prepare preceding day) and interview three students based on application. Time should be allowed for interviewer to screen and select applicants for interview.

Class selects applicant based on information learned from role-playing. Write a short paragraph explaining the reasons for your selection (may have to be outside assignment)

REVIEW: As time permits

SUMMARY: As time permits

EMPLOYMENT APPLICATION

HANDOUT #A-2

INSTRUCTIONS: PLEASE ANSWER ALL QUESTIONS.
IF YOU CANNOT ANSWER A QUESTION, WRITE "NONE."
BE CERTAIN TO SIGN YOUR NAME AT THE BOTTOM
OF THE REVERSE SIDE.

219
hospitality motor inns, inc.
2100 TERMINAL TOWER
CLEVELAND, OHIO 44113

NAME (LAST, FIRST, MIDDLE)	SOCIAL SECURITY NO.

STREET ADDRESS OR RFD	CITY OR POST OFFICE	STATE	ZIP CODE

HOME PHONE	BUSINESS PHONE	IF YOU ARE UNDER 21 OR OVER 65 YEARS OF AGE INDICATE DATE OF BIRTH	BIRTHDATE MO	DAY	YR.	HEIGHT	WEIGHT
( ) –	( ) –						

ARE YOU A CITIZEN OF U.S.A.?	IF NOT A CITIZEN, WHAT TYPE OF VISA DO YOU HOLD?	FOR WHAT JOB OR TYPE OF WORK ARE YOU APPLYING?
☐ YES ☐ NO		

STARTING WAGE EXPECTED? (PLEASE BE SPECIFIC)	DO YOU HAVE ANY PHYSICAL IMPAIRMENTS OR DO YOU HAVE ANY SERIOUS ILLNESS WHICH MAY LIMIT THE KIND OF WORK YOU DO? ☐ YES ☐ NO

IF YES, LIST THE IMPAIRMENTS OR ILLNESSES AND WORK LIMITATIONS.

EDUCATION

	NAME OF SCHOOL, CITY AND STATE	ATTENDED YRS.	ATTENDED FROM	ATTENDED TO	COURSE FOLLOWED	DID YOU GRADUATE? YES	NO	DEGREE
HIGH SCHOOL								X
COLLEGE OR UNIVERSITY								
NIGHT SCHOOL, BUS. SCHOOL - OTHER								

PREVIOUS EMPLOYMENT HISTORY

INSTRUCTIONS: BEGINNING WITH THE LAST OR PRESENT EMPLOYER, LIST ALL EMPLOYERS FOR WHOM YOU HAVE WORKED, EITHER FULL TIME OR PART TIME.

EMPLOYED MO. YR.	NAME AND ADDRESS OF EMPLOYER	NAME OF YOUR SUPERVISOR	YOUR POSITION AND DUTIES	RATE OF PAY	REASON FOR LEAVING
	1				
FROM	(AREA CODE) – PHONE				
TO	2				
FROM	(AREA CODE) – PHONE				
TO	3				
FROM	(AREA CODE) – PHONE				
TO	4				
FROM	(AREA CODE) – PHONE				

SPECIAL SKILLS AND TRAINING

INSTRUCTIONS: LIST SPECIAL JOB SKILLS AS TYPING; FORK TRUCK OPERATOR; BUSINESS MACHINES AS ADDING MACHINES OR CALCULATORS OR SKILLS RELATED TO FOOD/LODGING AS KITCHEN/DINING SERVICE, GENERAL MAINTENANCE IN WHICH YOU HAVE TRAINING.

EXPERIENCE, SKILL, TRAINING OR PROFESSION	COMPANY, SCHOOL OR MILITARY	NO. OF YEARS

212

(OVER)

HANDOUT #A-1

AJAX CORPORATION

JOB DESCRIPTION AND SPECIFICATION

Title Clerk Typist III

Salary Range $x,xxx - $x,xxx annually

Promotion line:
Clerk Typist I
Clerk Typist II
Clerk Typist III
Chief Clerk

FUNCTION OF THE JOB:

Under general supervision to be responsible for varied and complex clerical work involving the exercise of independent judgment, direction of clerical staff, and high degree of typing skill.

CHARACTERISTIC DUTIES AND RESPONSIBILITIES:

1. Direct the work of a small or moderate sized clerical unit.
2. Compile data and reports.
3. Code, classify, file, and direct filing of all materials in a large and complex filing system.
4. Give out information as approved by superior.
5. Answer routine questions.
6. Assist in the preparation and maintenance of records, including tabulation and posting of data.
7. Operate office machines as required.
8. Prepare materials for mailing.
9. Handle cash and other valuables.
10. Keep expenditure and income accounts, which may include auditing, vouchering, and scheduling invoices, payrolls, and expense accounts.
11. Perform related duties as assigned.

SUPERVISION RECEIVED:

Oral and written instructions are received from a designated supervisor.

SUPERVISION GIVEN:

Employees in this class may have limited supervision of employees of lower rank as assigned to the division.

MINIMUM ACCEPTABLE QUALIFICATIONS:

Ability to work with and get along with people.
Ability to pass corporate typing test.
High school graduation.
Two years of prior clerical experience, preferably at a business enterprise.

To help determine the number and kinds of employees needed, several factors should be considered. Sales forecasts for the coming year. Production schedules may be used in determining the number of employees needed. One should translate work loads into person hour requirements. Past experiences identify the hours needed to get the work load accomplished. Time-motion studies may also be used.

Long-Range Planning for determining employee needs:

1. Population age distribution
2. Technological developments
3. Competition
4. Levels of economic activities
5. Specific enterprise plans for growth.

SUMMARY: As time permits

ASSIGN-MENT: Hand out - A-1 job description
Hand out - A-2 application
Have completed by lesson on employee selection.
Prepare Interviewer

JOB CLASSIFICATION: Is a grouping of jobs on some specified basis such as kind of work or pay.

The process of analyzing a job after its design is essentially one of data collections. In setting up a job analysis four methods may be used:

1. questionnaires
2. written narratives
3. observation
4. interviews

Narrative descriptions should be requested of both the job incumbent and the supervisor.
After the job analysis is complete, a job description should be developed. The job description should describe pertinent job facts.

ELEMENTS OF JOB DESCRIPTION

Job identification
Job summary
Duties performed
Supervision given and received
Relation to other jobs
Machines, tools, and materials
Working conditions
Definitions of unusual terms

Another important step that precedes recruitment is to identify the employee qualifications for new employees. This is accomplished by job specifications. After developing the job description the basic human qualities needed to perform the job must be identified.

QUESTION: What qualifications should an employer look for in his employees?

Education
Experience
Special skills

Determining the need for employees:

The number and kinds of employees needed must be determined. An organizational chart may be set up to identify needed employees.

MAILING AGENDA

Begin Experiment April 3

Mailing #1 - April 3

Return:

Item	Check When Mailed
Student Consent Form	_____
Ability Test	_____
Student Number Assignment Sheet	_____
Student Questionnaire	_____
Pre-Test	_____

Mailing #2 - Upon Completion of the Post-Test

APPENDIX R

IDECC Instructors Handbook

CONTENTS

POST SECONDARY - IDECC

Description of Experimental Study - Post Secondary

Experimental Study Conditions

Steps of the Experimental Study

Student Code Numbers Explanation

Student Code Numbers Assignment Sheet

Student Orientation

Human Subjects Consent Form

Student Questionnaire

Ability Test

Sample Answer Sheet for Pre and Post Tests

Resource List

Mailing Agenda

Student Competency Records

The experimental study on the post secondary level will be conducted to measure the achievement of post secondary students when learning both by the IDECC system and the traditional approach. Within the study, the two levels of instructional approach will involve the teaching of the identical curriculum content for a period of four to six weeks. A pre-test and post test will be administered previous to the treatment and following the treatment respectively to control internal validity.

Sixteen classes will be selected throughout the nation, eight of which will utilize the IDECC approach, and eight the traditional approach. Each class will be divided into high and low abilities, thus actually giving thirty-two groups for analysis. This division will give the investigator means to detect any interaction between high ability and low ability students in respect to the instructional approach.

The sixteen classes will be selected according to (1) recommendation of state supervisors, (2) volunteer action on the part of the instructor, and (3) the identification of similar courses being taught by the instructors.

The treatment will be randomly assigned to the selected intact groups, resulting in a quasi-experimental design.

An inservice workshop will be held for each of the two groups (traditional and IDECC) in order to control the experiment as closely as possible. Both groups will be in workshop for three days. Instructors will be paid $100.00 a day for each day they are in workshop in Columbus, Ohio. Expenses will reimbursed at double room occupancy, air fare and $10.00 a day for meals plus lunch.

Each participating instructor will be given a set of the IDECC system at the close of the study.

EXPERIMENTAL STUDY CONDITIONS

For the study to be valid the following conditions have to be met:

1. The instructor of the unit must attend the workshop in Columbus, Ohio. (Expenses paid)

2. Students and instructor must sign a human subject clearance form. (See attached)

3. The students in the class must take a (general ability) test. (Takes approximately 20-30 minutes)

4. A pre-test and post-test (developed by IDECC) must be administered to all students in the study.

5. The unit must be taught in the manner prescribed in the workshop. IDECC instructors will use the IDECC approach. Traditional instructors will use the method established by the instructors in the traditional workshop.

6. The provided and identified resources must be used.

7. Preliminary work must not be done on the unit with the exception of obtaining resources if you wish.

8. A brief background questionnaire will be administered to both instructor and student.

9. The previously sent unit must be implemented during the month of April.

10. The course used for the study must be an accredited post secondary course.

POST SECONDARY

Steps in Experimental Study

1. Orient Students

2. Have Students Sign Consent Form

3. Assign Student Numbers

4. Administer Student Questionnaire

5. Administer Ability Test

6. Administer Unit Pretest

7. Mail Student Numbers, Consent Forms, Student Questionnaires, Ability Test and Pretest with Answer Sheets. (Registered Mail)

8. Implement Competency Packets

9. Complete Student Competency Records.

10. Administer Posttest

11. Mail Posttest Answer Sheets and Student Competency Records. (Registered Mail)

STUDENT CODE NUMBERS

It is necessary to use student code numbers on all data gathering instruments in order to protect the identity of the student. The only form which will contain the student's name will be the student consent form. However, this form will not contain the number of the student.

In your folder, you will find a form with numbers. Indicate the numbers assigned to students by checking the appropriate numbers and return the form to the project office in the first mailing. On the form in your folder which has a space for the student's name beside the number, fill in the name beside the numbers which has been assigned to the student and retain the form for your reference. Student numbers must be entered on the following items. (Please be sure the number is accurate.)

1. Student Questionnaire
2. Ability Test
3. Pretest Answer Sheet
4. Posttest Answer Sheet

IDECC Participants

#	Student NAME
21101	
21102	
21103	
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21130	

STUDENT ORIENTATION
POST SECONDARY EXPERIMENTAL STUDY

Purpose

You are involved in an experimental study which is being conducted to measure the achievement of post secondary students when using two different approaches to learning material. There are eight classes throughout the nation using the traditional approach and there are eight using the IDECC approach. Our class will be using the Traditional approach. This study will last approximately three to six weeks. You will be learning material which would ordinarily be taught in this course regardless of our involvement in this study.

Confidentiality

For the purpose of this study no names will be used. You will be assigned a number and will go by that number throughout the study. The only information the investigators will obtain in regard to identity is the number attached to any data submitted for processing. Your name and personal identity will not be revealed to anyone except myself (the instructor).

Testing and Questionnaire

In order to determine how much you actually learned from the teaching approach, it will be necessary for you to take a pretest and a posttest. The pretest will tell us how much you know about the material now and the posttest will tell us how much you learned during the time the teaching approach was used.

A second evaluation instrument which will be given to you is a quick verbal ability test. The purpose of the ability test is to enable the investigators to determine if one approach of teaching is more effective than another depending on the individual student's ability.

You will be asked to complete a background questionnaire which will enable the investigators to make several comparisons in the study. Again, no names will be used on the questionnaires, only your assigned number. Data is gathered from you at different times, the assigned number is only for the purpose of keeping your individual data grouped.

Volunteer Participation

Your participation in this study is strictly at your own option; you may withdraw at any time. We must ask you to sign a form consenting to be a part of the study. The form still provides you with the withdrawal option at any time.

Protocol No. _____

RESEARCH INVOLVING HUMAN SUBJECTS
CONSENT TO SERVE AS A SUBJECT IN RESEARCH

232

BEHAVIORAL AND SURVEY FORM

I consent to serve as a subject in the research investigation entitled: Experimentation and Further Validation of the IDECC Competency Based Instructional Approach in Post-Secondary Education.

The nature and general purpose of the research procedure have been explained to me. This research is to be performed by or under the direction of Dr. Terry M. Williams, who is authorized to use the services of others in the performance of the research.

I understand that any further inquiries I make concerning this procedure will be answered. I understand my identity will not be revealed in any publication, document, recording, video-tape, photograph, computer data storage, or in any other way which relates to this research. Finally, I understand that I am free to withdraw my consent and discontinue participation at any time following the notification to the Project Director.

Signed _____
(Subject)

Date _____

Time _____ A.M. P.M.

_____
Witness (Instructor)

_____
Investigator - Betty H. Turner

Student Code # _____

POST SECONDARY
STUDENT QUESTIONNAIRE

Please check education completed:

_____ High school or equivalent

_____ Vocational/technical school
Area of study _____

_____ College
Circle # of years completed:

1 2 3 4 5 6 7 8

Major area _____

Minor area _____

_____ Associate degree

_____ Baccaluareate degree

_____ Masters degree

_____ Other, please specify _____

_____ _____

Were you enrolled in a high school distributive education program?

_____ Yes (# of years ____) _____ No

Have you had any education training in the area of recruitment, selection and training of personnel?

_____ Yes _____ No

If yes, please explain _____

_____

Are you presently employed? _____ Yes _____ No

If yes, describe employment _____

_____

_____

Indicate total number of years of work experience related to your present field of study: _____

Do you have supervisory experience? _____ Yes _____ No

If yes, describe amount of experience _____

_____

Specify degree working toward and field of emphasis _____

_____

Indicate course in which this experiment is taking place _____

_____

Indicate sex (circle) M F

Please check the range your age falls within:

17 or under	_____	30-32	_____
18-20	_____	33-35	_____
21-23	_____	36-38	_____
24-24	_____	39-41	_____
27-29	_____	42 or over	_____